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1.0 Method statement

Document created: 06 Mar 16
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McCrone Mews

Site address:
Belsize Lane
London
City of London
NW3 5BG

Project reference: McCrone Mews
Principal designer: Dean Willars
Principal contractor: DCS Universal Carpentry & Joinery
Location of works: McCrone Mews
Start date and end date: 04/04/2016 to 04/11/2016
Site supervisor: Sorin Voicu
Site supervisor phone: 07951227844

1.1 Description of activity

Flat 19 & flat 20 major refurbishment: new acoustics floor construction, new insulated ground floor construction including heating, upgrading existing walls with MF system and PB insulation, stud walls construction, underfloor heating, soil pipes, plumbing including central heating, electrics.

Flat 21 refurbishment: stud work walls/ party walls construction to allow office 8/9 to re-locate, underfloor heating, form new front door opening in existing exterior walls, new floor construction to infill removed staircase, new first fix soil waste pipes, new boiler installation and gas connection, upgrade existing walls with MF system & PB insulation.

Flat 6, 22 and 23 new building works: scaffolding, removing of existing roof, 16 no pad foundation, steel columns, new metal staircase - walkway to first floor, specialist balustrade matching existing, drainage, soil pipes, block work, carpentry, roofing, exterior insulation, stud walls, rendering, glazing, acoustic flooring, flat and pitched roofing, Velux windows fitting, box gutters, plumbing, electrics, painting, tiling, kitchen fitting, floor fitting, steel framework.

Office 8 & 9 works: moving doors, lintels, steel work, painting, electrics

This method statement is critical to the health and safety of the activity it relates to. It is to be strictly adhered to. Any deviation must first be authorised by the Site Supervisor

1.2 Sequence of operations

1.2.1 Scaffolding

Sign in and induction

- All operatives will arrive onsite and sign in at site office
- All operatives will undertake a site induction

Delivery or removal of scaffolding from site

- Ensure a safe, designated area has been provided for the parking and unloading of scaffolding materials for project
- Where materials cannot be left on trailers, stillages and bins will be provided
- Install exclusion zones and display clearly all relevant signage
- If on public highway, cones and signage to be in place plus pedestrian management
- Trained operators to use correct manual handling techniques at all times, conforming to SG6;10
- Keep scaffold materials clear of buildings when lifting or lowering
- Use guide rope on long loads when lifting or lowering
- 300kg rack and pinion hoist to be used to access materials to and from work place

Erecting multi lift independent tied scaffold

- The base plates and sound soleplates shall be placed to form 4 + 2 board wide arrangement from the building line
- Standards shall bear centrally onto a base plate & sound timber sole plates. The standards shall be placed to the designated bay spacing as required to the duty of use. They are selected and placed to provide a staggered joint arrangement between multi lifts
- A longitudinal ledger & transom are then secured to the uprights using double couplers to form a self-supporting frame. Fixed 150mm above the base plates
- Alternate pairs of standards are secured into position and vertically plumbed using temporary brace suitable fixed. With the temporary braces in place, the first lift level of framework can commence
- Ledgers are placed in order to provide a staggered joint arrangement between bays & lifts connected to the upright by a load bearing couplers. The ledger & upright can be plumbed horizontally & vertically using the braced members
- The main transom tubes are placed across the ledgers within 150mm of the braced uprights secured using single couplers
- The outside uprights can now be vertically plumbed on the braced line
- Intermediate transoms are required on a fully boarded lift at 1.2m centres secured with single couplers with a butt joint to support each of a fleet of boards. Non-working lifts minimum 3 number transoms per board

Dismantling multi lift independent tied scaffold

- All operatives will report to the Principal Contractor when entering site and request induction training
- A Method Statement briefing will be given by the Scaffolding Supervisor and all persons present recorded in the site file
- The area below the scaffolding will be secured against unauthorised entry by the Principal Contractor before work commences
- Fall arrest Harnessing will then be checked and worn by all operatives, and the rescue procedures checked for suitability
- Dismantling will then commence in accordance with HSE Guidance SG4:10, always working from a boarded platform directly below the area being dismantled. Fall arrest harnessing will be worn at all times during dismantling
- Materials will be passed down to each boarded level to operatives and stacked and secured on the Loading Bay, ready for removal by the onsite cranes
- As each section of scaffolding is removed, all remaining scaffolding will be secured so that it is in a safe condition at all times

- All persons involved in the dismantling works will be issued with and wear fall arrest harnessing secured to a suitable anchor point at all times
- At no time will any person dismantle the scaffolding platform that they are using, all works will be carried out from below
- Materials will be removed as work progresses ensuring a clean working area at all times
- Materials will then be loaded to the Scaffolding Lorry and removed from site as works progress

Erecting 'A' frame guardrail scaffold

- The sole board is to bear centrally onto solid foundations.
- Base plates will be placed onto the sole boards with base plates placed at the bottom of the standards
- The standards will be vertical
- The standards will have a double coupler fix at a height of approximately 1m and a second coupler will be fixed approximately 470mm max down from our first coupler
- The ‘A’ frame section shall be placed at 6-metre intervals
- Tubes are placed into couplers and tightened
- Once the 6-metre section is, completed two number rake tubes are connected to the guardrail with double couplers and tightened
- At a height of 300cm a double is connected to the standard, a tube is placed into the couplers and tightened; a swivel coupler is fixed to the rake tube and connected to our tube to form the ‘A’ frame guardrail
- Toe boards are secured into position supported by additional standards at 1.8metre centres

Dismantling 'A' frame guard rail system

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Erecting ladder beams/unit beams

- The tubular beams are placed one line at a time spanning the prescribed opening having an operative at each end of the unit beam/ ladder beam raising by hand to the required level and securing to the supporting framework using double couplers to the top and bottom chord members
- Additional unit beams are progressively connected together by nut and bolt
- Once a pair of beams is erected, they are laced together with transom tubes. The top chords are restrained with transoms using single couplers if to be boarded otherwise double couplers are to be used. These transoms are placed at maximum 1.2m centres
- The top of the bottom chord is also laced with transom tubes using double couplers and these transoms are placed at maximum 2.4m centres

- Diagonal plan braces are then to be provided, secured to the underside of the top chord using swivel couplers
- Depending upon the span of the beams and accessibility of the supports, a central support/access tower may be required. This tower would be self-supporting and the top lift fully boarded and guards rails to act as a temporary working platform
- All times operatives are to provide minimum of three number boards wide platforms with guardrails in place during erection and dismantling procedures

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1.2.2 Site set-up

Installation of compound and storage areas

- Use excavator to remove existing topsoil and load it into dumper for it to be taken to the topsoil stockpile
- The excavator will then blade off and level existing ground
- Once the haul road is completely excavated and levelled a layer of geotextile material will be placed on the excavated area
- Once all the topsoil has been stripped and transported to the stockpile area the stockpile will be covered with geotextile to prevent damage to the material
- Then a layer of MOT Type 1 stone or similar will be placed and compacted. The dumper will tip the stone onto the laid out geotextile materials, where the excavtor will level the stone out to the required depth compact using a roller

Installation of office and welfare facilities

- Lorry loader will position at the nominated lifting area and follow risk assessment for operating vehicles onsite
- Lorry loader operator will set up the lorry loader as per the manufacturer's instructions. Suitable supports will be placed under the stabilised legs
- Lorry loader will raise jib and position so as to attach O-ring of lifting chains and inertia reel fall block to crane hook
- Lorry loader operator will raise crane and position over the centre of the portable unit, generator and fuel bund and through suitable access too roof of portable unit, will attach lifting accessories to the unit. A safety harness / inertia reel fall arrest assembly will be used during any roof access and will secured at ground level, this will be secured to the lorry loader hook block and fitted at ground level

- An appropriate number of guidlines will be secured to the portable unit to assist in controlling potential for unit swing
- The lorry loader job will now be raised to take the weight of the load and ensure that lift is centred and stable (test lift carried out). Load will then be slewed over to the final position and lowered into place
- Once the lorry loader operation is complete the slinger/banksman will remove lifting accessories from the lifting eyes of the portable unit, gaining access by use of a suitable access system
- Once the four legs of the lifting accessories are removed, the lorry loader operator will raise jib, remove lifting accessories and stow crane for transit. Operation is now complete
- Repeat lifts will follow all previous sections as above
- All waste shall be collected and removed from site
- Once all units are placed, a qualified electrician will connect up all the units to the generator and do the required testing and supply completion certificate

1.2.3 Excavation

Sign in and induction

- All operatives will arrive onsite and sign in at site office
- All operatives will undertake a site induction

Initial works

- Obtain underground service prints, call local authorities and obtain permits wheres necessary for excavations
- Lay out all appropriate signage to cordon off safe working area and adjust as works proceed or change
- Use cable location equipment to identify all underground services and clearly mark locations onsite
- Double check all underground services locations with plans, reconfirm with local authorities if any discrepancies
- Outline locations of excavation on site, ensuring ground works and or surveying team confirm locations of trenches
- Check excavator's inspection permit, ensuring an up to date inspection has been undertaken
- Unload the excavator from the trailer and deliver to location
- Deliver and prepare materials that are adequate for shoring any trenches

Excavation works

- Protect and support any exposed existing services
- Move the excavator/digger into a fully guarded area
- Position the compressor away from the excavation but within the guarded work area
- Remove pneumatic breaker and hose from the vehicle, check for damage and connect hose to breaker and the compressor
- Ensure that access to and from the excavation by the use of a ladder positioned on a firm base, tied and footed
- Dig trial holes in advance of the proposed excavation, hand dig within 500mm of all services
- Commence excavating
- Remove spoil from site according to local authority specifications
- Excavate for Open-Cut ensuring that if the excavation is 1.2m or deeper that it is adequately shored
- Excavate for Launch Pits ensuring that if the excavation is 1.2m or deeper that it is adequately shored
- Excavate for Reception Pits ensuring that if the excavation is 1.2m or deeper that it is adequately shored
- Ensure that safe access to properties is maintained by the use of walking boards and steel plates
- Allow for repair of services
- Allow for install of services
- Reinstatement to excavations to be carried out once works deemed complete

1.2.4 Concrete works

Sign in and induction

- All operatives will arrive onsite and sign in at site office

- All operatives will undertake a site induction

Preliminary works

- Excavation of the foundation / slab will have been carried out by machine excavators to the required depth
- Setting out engineer will set out grid lines and levels under supervision of the site supervisor
- The area of the works will be segregated with signage and fencing to create a working zone ready for formwork install

Installing formwork & reinforcement

- Permit to work required before undertaking an works in confined spaces
- Formwork will be constructed to the beams and slab edges using ply and hand tools
- Steel reinforcement will be delivered by flatbed lorry
- Steel reinforcement will be mechanical lifted into position under supervision of banksman
- Steel reinforcement will be lifted from lorry by hand and handled safely into position before assembly taking place
- Check steel in correct location according to structural engineers drawings
- The steel will be tied by hand and checked for accuracy by site supervisor
- Mushroom caps will be placed over any exposed steel
- Check all support props for formwork before pouring concrete

Pouring concrete

- Check that correct concrete type has been ordered when taking delivery of concrete
- Operate small concrete mixer, adding aggregate mix with water as per instructions from manufacturer
- Use barrow and shovel to distribute concrete safely around site to pre-designated locations
- When using a concrete pump, a permit will be completed and signed before pour
- The pump lorry will reverse under supervision of the banksman to the works area and set up in accordance with the manufacturer’s instructions
- The pump operator will move the boom into position with the operative located at the end to move the pipe to the desired location
- The foundations will be poured
- The slab will be poured
- Concrete vibrator will be used to distribute aggregate into gaps
- Concrete surface swept and levelled with plant to smooth surface
- Concrete surface swept and levelled with hand tools to smooth surface
- All exposed steels will have mushroom caps
- All formwork will be struck after is has cured in accordance with the engineers guidelines

Concrete surface repairs

- Clean debris from cracks by vacuuming or flushing with water or other specially effective cleaning solutions
- Seal surface by applying an epoxy, polyester, or other appropriate sealing material to the surface of the crack and allowing it to harden
- Mix epoxy according to the manufacturers instructions
- Inject the epoxy using hydraulic pumps, paint pressure pots, or air-actuated caulking guns according to pressure requirements
- After the injected epoxy has cured, the surface seal should be removed by grinding or other means as appropriate

1.2.5 Steelworks

Arrival onsite

- All engineers will arrive onsite and sign in at site office
- All engineers will undertake a site induction

Demolition of existing structures

- A thorough design of the safe sequences of demolition activities will be undertaken before any work proceeds
- All demolition or strip out areas to be cordoned off and only competent or trained operatives can enter this space
- Risk assessment's will be discussed with work team before starting works and updated as necessary
- All members to wear correct PPE at all times
- A considered and progressive demolition approach will be implemented
- Mechanical handling aids will be used when removing structural items
- As work progresses site manager to ensure safe system of work is employed at all times and updated as necessary

Unloading of deliveries

- Delivery vehicles will be guided into the unloading area by the designate banksman
- The banksman will guide forklift truck operator during the unloading processes
- All items that are to be unloaded will be double checked to ensure safe working load capacities are satisfied
- All loads unloaded are to be laid down in a safe manner, and within a predesignated area

Setting out for new steel structural works

- Set up and cordon off the working area, remembering to leave plenty of manoeuvring room to move the materials and equipment around in. It is essential that no other persons or equipment etc are allowed in the working area, as this may restrict the works and prevent access to parts of the building where fixings need to be made, as well as causing additional hazards for anyone below the working area
- Under no circumstances must any members of the public, visitors or persons employed on the site be permitted within the working area unless accompanied and supervised. Safety helmets must be worn by all persons within this area whilst the works are being carried out
- To reinforce the hazards associated with the works, warning and safety signs must be erected around the working area, these must include ‘Keep Clear’, ‘No admittance to unauthorised persons’ and Warning Men Working Overhead’
- Floor areas to be marked out by supervisor to identify base plate locations
- Holes will be drilled in floor using 110v drill
- Through bolt floor fixers will be inserted into the drilled holes

Installation of steel columns

- Columns will be manoeuvred into lifting area using fork lift truck and/or skates
- Banksman will guide fork lift driver or other manual handling plant operator into agreed column location
- Fork lift driver or plant operator will lift column into place with guidance from banksman
- Column will be lowered onto mountings on baseplate once column vertical and bolted into position
- An operative working from above on access equipment will unhitch the sling from the steel

Installation of beams

- Beams to be moved into area using forklift truck or on skates and manually pushed into designated area
- Beams will be lifted into place using forklift truck and directed by banksman
- Once beams in place, operatives will bolt into place from safe working platforms using nut runners
- All bolts tightened to correct torque and marked with white marker pen

Installation of joists

- Joist will be moved into area by fork lift operator and guided by banksman
- Joists will be lifted onto scissor lifts, with joists resting on basket of lifts and once scissor lift positioned at each end of the joist
- Joists will be lifted in a slow, controlled manner at the same time and guided by the banksman
- Joists to be lifted onto the pre-attached cleats on the beam
- Pre-drilled holes in the joist to be aligned with those in the cleat and bolts inserted, repeated on the other side

- Nuts to be tightened using nut runners
- Work should stop immediately if any of the above cannot be undertaken safely and in a smooth manner

Safety netting installation

- Installation of safety netting to be undertaken by trained operatives only, and wearing correct PPE
- All safety netting to comply with EN1263
- Safety netting to be rigged between primary steel work across each of the bays in one operation
- All netting to be signed off by rigger and had over notice provided

Installation of handrails

- Trained operatives working from scissor lifts or other safe working platform are only operatives to install handrails
- Handrail posts to be installed to beams, then handrail poles fastened to posts
- Handrails to be cut to size using abrasive wheels and surface finished accordingly

Installation of decking

- Suitable raised access platforms with correct PPE to be used during installation of decking
- Datum point will be provided on joists to work from
- Loading platform will be created using the datum point
- Packs of decking to be loaded onto loading platform and guided into place by banksman
- Decking boards will be manually lifted into place by 2 operatives and fixed concurrently
- Any board cutting will be undertaken in a safe designated area

Installation of Metsec SFS from scaffolding

- Scaffold will be used to facilitate the works and to provide a safe working platform. The working platform will be constructed with an integral toe board, double handrails as per the requirements of the Work at Height Regulations
- The principal contractor will be responsible for the provision and erection of the scaffold by suitably qualified scaffolders
- Under no circumstances will the operatives be permitted to over stretch or overreach through or over the handrails, they must at no time reach more that 700mm (approximately an arms length) from the working platform. Similarly the operatives will not be permitted to climb out of the working platform at any time. All work is to be carried out from within the security of the hand railed platform
- Before starting work, carry out a visual inspection of the work area to ensure that the required works are as per the specification and that no additional works or materials are likely to be required. If additional works are required, or if any suspect materials such as asbestos are present, inform the client and head office immediately
- Transport all materials to working area, ensuring that appropriate care is taken when manual handling large, heavy or awkward shaped objects such as the components of the SFS
- Before commencing work, ensure that all personal protective equipment is being worn and inform all other persons that they should stay clear of the working area, no person, including the clients representatives should be permitted in the vicinity of the working area without wearing the appropriate PPE
- On Commencement of works, prepare the site for work by advising the Client of the hazards associated with the works, the scope of works and the restrictions that will be placed upon the working area in terms of where other contractors and persons can and cannot go in relation to the property whilst the works are being carried out. An exclusion zone must be established below where the works are being carried out
- Check for buried/hidden services within the walls of the premises, before drilling or cutting into any such structure
- The Metsec SFS (Steel Framing System) will be secured to the main structure as per the specification and contract drawings
- All panels will be secured using the recommended fixings in accordance with the designers fixings layout requirements to ensure that the panels are securely fixed to the structure
- Once the works have been completed, the work area will be cleaned and tidied and all waste will be removed from the site and placed into the waste skips for disposal off-site

Installation of Metsec SFS from MEWPS

- On Commencement of works, prepare the site for work by advising the client/principal contractor of the scope of works and the restrictions that will be placed upon the working area in terms of where other persons can and cannot go in relation to the working area
- Set up and cordon off the working area, remembering to leave plenty of manoeuvring room to operate the MEWP within. It is essential that no materials, plant or other equipment is allowed in the operating zone of the MEWP, as this may restrict the operation of the MEWP and cause additional hazards for anyone on the ground
- The working area should be secured using barriers and road cones, with sufficient working space being allowed for the manoeuvring of the MEWP. This will inevitably mean that the client will lose a proportion of the working area around the building whilst these works are being carried out - temporary diversions for pedestrians and site traffic etc may therefore be required
- Under no circumstances must any members of the public, visitors or persons employed on the site be permitted within the working area unless accompanied and supervised. Safety helmets must be worn by all persons within this area whilst works are being carried out
- To reinforce the hazards associated with the works, warning and safety signs must be erected around the working area, these must include ‘Keep Clear’, ‘No admittance to unauthorised persons’ and Warning Men Working Overhead’
- A MEWP will be used to facilitate the works and to provide a safe working platform. The specific MEWP to be used will be selected following consultation with the hirer from whom the equipment will be hired, those it is proposed that a scissor lift will be used. The man cage will be constructed with an integral toe board, double handrails and secure anchor points for attaching the ‘Work Restraint System’ too
- The work restraint system will consist of full body harnesses and lanyards that are attached to proprietary anchor points within the man basket of the MEWP. Due to the nature and position of the work, it will be necessary for the operatives to reach over the handrails of the man basket, the work restraint system will restrict and prevent the operatives from over stretching over/through the handrails, minimising the risks of falls from the man basket
- The harnesses and lanyards must be properly worn by the operatives at all times and securely fixed to the anchor point
- Under no circumstances will the operatives be permitted to over stretch or overreach through or over the handrails, they must at no time reach more that 700mm (approximately an arms length) from the man basket. Similarly the operatives will not be permitted to leave or exit the man basket at any time. All work is to be carried out from within the man basket of the MEWP
- Before starting work, carry out a visual inspection of the work area to ensure that the required works are as per the specification and that no additional works or materials are likely to be required. If additional works are required, or if any suspect materials such as asbestos are present, inform the principal contractor and head office immediately
- All debris will be placed into a “skip” or bin. Should the debris become a hazard due to the volume, fire risk or due to trip and slip hazards of wet materials it will be removed from the work area/site immediately. Care will be taken to ensure that trip hazards are reduced or removed and access / egress routes remain clear
- Remove all rubbish, scrap and waste materials/packaging from the site and dispose of appropriately. Leave the site in a clean and tidy state

Staircase installation

- Any areas on mezzanine staircase to be installed should be safely cordoned off to prevent falls from height
- Main staircase to be assembled on ground floor level
- Staircase to be lifted into position using fork lift truck and sling and guided into place by operatives working from safe working platforms or scissor lifts
- Once staircase in position, operatives will bolt into place, and install handrails
- Operatives to install the staircase surround

1.2.6 Bricklaying

Delivery of materials

- Ensure a safe, designated area has been provided for the unloading of masonry materials for project
- Safe method of manual handling employed and materials loaded out to designated areas

Mixing of compounds

- Add compounds to mixer plant in safe area according to supplier specifications and use
- Ensure safe use of plant at all times

Demolition of brickwork

- Ensure all services are isolated and rendered safe before commencing work
- A safe working zone will be created and cordoned off from other workers or public
- Supports installed to areas as requested by site supervisor or structural engineer according to demolition plan
- Structural elements are demolished under the control and supervision of a competent person
- A safe access is maintained to the work face at all times
- Debris to be removed at regular intervals and disposed of according to site plans

Form masonry walls

- Survey and setting out
- Application of bitumen compound and lay damp proof course at base
- Lay bricks, Cement Mortar and Pointing
- Repeat above allowing for structural openings and supports according to approved drawings
- Install lintels and structural members where needed
- Remove waste materials according to site waste management plan

1.2.7 Roof works

Sign in and induction

- All operatives will arrive onsite and sign in at site office
- All operatives will undertake a site induction

Inspection and access onto roof

- Remote inspection using mast photography or videography where only visual inspection is required
- Follow risk assessment to eliminate any inherent risks when accessing the roof is required
- All safety precautions in risk assessments to be followed
- Those accessing roof should have relevant training
- Erect barriers at ground level to create a work area the point of access to the roof to prevent access by staff or members of the public
- Use boom lift to inspect or access roof
- Erect mobile access equipment or a secured tower scaffold to inspect or access
- Use fixed scaffolding to access roof
- Ensure adequate edge protection to roof has been provided
- Use dedicated access to roof if available

Maintenance or cleaning of roof

- Where possible work should be undertaken where the supervisor or client can view works
- Correct plant, access equipment, and PPE for the job will be used to access roof
- Undertake maintenance of roof or equipment to roof
- Clear or clean as instructed by principal contractor or client

Removal of roof cladding and structure

- Structural survey undertaken to check integrity of cladding and sub structure
- Safe areas designated where engineers can work from
- Remove roof cladding and soft stripping as required
- Remove roof structure or joists as required
- All materials safely transferred to ground using plant

New roof trusses

- The trusses will be fixed in sequence and placed in accordance with working drawings
- Engineers trained to work from height will wear fall protection at all times
- Principal contractor to provide relevant working platforms including scaffolding, edge platforms, netting etc.
- The slinger/ banksman will prepare load for lifting from trucks
- The bundle of trusses will then be lifted onto the wall plate and temporarily braced until needed
- The bundle of trusses will be carefully separated by two joiners and the first truss will be lifted into position manually and temporary braced to both wall plates
- The remaining trusses will then also be manually lifted into position and temporarily braced back to the first truss
- The diagonal bracing will be fixed to the top of the first truss and nailed to the wall plate using 75mm long galvanised nails
- All longitudinal bracing will be fixed to the trusses, ceiling ties and struts using 75mm long galvanised nails
- The trusses will then be fixed to the walls and gables by bracing using galvanised metal retaining straps
- The two joiners will then remove the temporary bracing and inspect all trusses to ensure they are aligned vertically and free from bowing

New roofing structure or cladding

- Correct materials delivery techniques employed
- Trained engineers will install new roof structure
- Trained engineers will install new roof cladding
- Wastage shall be transferred to ground safely

Installing vapour control layer

- A Polythene vapour control layer will be loosely laid onto the deck
- The deck will be primed where required and a vapour control layer will be installed onto the deck

Installing insulation

- Insulation will be laid in accordance with manufacturer's guidelines and fixed to the decking
- Insulation will be laid in accordance with manufacturer's guidelines and adhered to the VCL using polyurethane adhesive
- The insulation will be torched and laid in accordance with the manufacturer's guidelines
- The insulation will be loosely laid onto the membrane and will be secured in place by roof finishes i.e. paving slabs or pebbles

Installing membrane

- The single ply membrane will be installed onto the insulation board and mechanically fixed in accordance with the manufacturer's instructions along the seam edges. The Membrane is heat-welded together by trained operators using hot air welding equipment approved by Manufacturers
- The single ply membrane will be installed onto the insulation board and adhered in accordance with the manufacturer's instructions. The Membrane is heat-welded together by trained operators using hot air welding equipment approved by Manufacturers
- An adhesive will be poured onto the insulation boards, then the membrane will be rolled into the adhesive with pressure being applied across the roll width
- An Intermediate layer of felt membrane will be torch applied to the insulation to achieve an approximate 30% bond. The Cap sheet will be applied in the same way but will achieve a full bond by ensuring that the heat dispersible film is completely removed
- A waterproofing membrane will be installed directly to the deck
- An Intermediate layer of felt membrane will be torch applied to the substrate to achieve an approximate 30% bond. The Cap sheet will be applied in the same way but will achieve a full bond by ensuring that the heat dispersible film is completely removed
- The equipment will be hired via a specialist and maintenance records should be available for inspection. The Hot Melt will be delivered to site in block form and melted in the thermostatically controlled, mechanically agitated boiler

- Once the material has reached the required temperature of between 210 and 230 degrees, it will be taken from the boiler by banjo and discharged into buckets and carried to area for laying
- 1st layer of the hot melt monolithic rubberised bitumen will be applied to primed area and spread by a rubber bladed squeegee. This layer forms the base of the system. Polyester reinforcement layer will be rolled out and bedded into the first later while it is still hot, allowing the hot melt to partially bleed through. The reinforcement also provides foot traffic access for the installation of the second layer
- A second layer of hot melt is then poured onto the polyester reinforcement and again spread by a rubber bladed squeegee to a required depth. This second layer bleeds through the reinforcement to blend with the first application of hot melt to form a single monolithic waterproof layer
- The felt protection layer is bedded into the second layer while it is still hot and the laps are torch sealed
- A single ply membrane will be loose laid onto the decking

Detailing

- Felt details will be carried out in two coats using torch on felt. The felt for the perimeter detailing will be cut to size and offered up into position. Half of the felt will be exposed and a gas torch will be passed over the film to activate the bitumen underside and will then be pressed into position. The other half will then be installed in the same manner
- Perimeter detailing will be formed with a combination of single ply metal trims mechanically fixed to the substrate and membrane welded to the coated metals
- Perimeter detailing will be formed with a combination of single ply metal trims mechanically fixed to the substrate and membrane welded to the coated metals, and adhered to the variety of substrates where required using the manufacturers contact adhesive. Joints will be hot air welded using heat guns

Roof finishes

- A protection/filtration layer will be rolled out over the deck, this will be secured by drainage/water retention layer, covered in filter fleece with substrate and bio-diverse products laid over to the required specification. All green roofing products will be lifted to roof level and distributed by crane, supplied by main contractor
- Pebbles will be laid as per specification
- Paving slabs mounted upon 15mm pave pad supports will be positioned on top as ballast

1.2.8 Joinery and carpentry

Removal of existing joinery

- Remove any existing joinery onsite
- Dispose of joinery according to the site waste management plan

Delivery of materials

- Ensure a safe, designated area has been provided for the unloading of joinery materials for project
- Safe method of manual handling employed and materials loaded out to specific areas of work

Joinery 1st Fix

- Refer to risk assessment for safe method of work
- Set up cutting equipment in approved space by management and according to risk assessment
- Fit ply groundings to wall for fixing points behind wall
- Fit door frames according to manufacturers spec and approved layout
- Fit floorboards according to manufacturers spec and approved layout
- Fit staircases according to manufacturers spec and approved layout
- Fit windows according to manufacturers spec and approved layout

Joinery 2nd Fix

- Fit skirting boards according to manufacturers spec and approved layout
- Install door surrounds / architraves according to manufacturers spec and approved layout
- Install doors according to manufacturers spec and approved layout
- Fit Intumescent strips to doors and frames
- Install shelving according to manufacturers spec and approved layout
- Install door handles and locks according to manufacturers spec and approved layout

- Remove waste from site according to the site waste management plan

1.2.9 HVAC

Service and maintenance

- Check running pressure
- Clean coil of indoor / outdoor unit
- Clean pump
- Test pump
- Clean filter
- Clean outdoor unit
- Check controls for correct operation
- Replace damaged filter
- Check on / off air temperature of the coil on the indoor/outdoor unit
- Clean fascia of indoor unit

Pipework installation

- Pipework delivered to a safe, pre-determined secure location onsite
- Install CHW and LTHW pipework
- Hot works to be organised and agreed with client management before undertaking hot work
- Pipework to be lagged
- Pipework to tied to tray

1.2.10 Electrical

Electrical isolations

- Obtain permit to work
- Place warning notices and secure areas where isolations are to be undertaken
- Conduct fault diagnosis using approved test instruments
- Identify isolation points and verify de-energisation of electrical circuits & equipment
- Lock off isolations to eliminate accidental re-energising

Removal of existing electrical services

- Removal of existing LV cabling
- Removal of existing HV cabling
- Removal of all redundant electrical cabling
- Remove all items from site according to site waste management procedures

Working in live electrical risers

- Verify if permit to work required
- Carry out tool box talk on Method statement with all operatives undertaking or associated with the works
- Place warning notices and secure areas where isolations are to be undertaken
- Conduct fault diagnosis using approved test instruments
- Identify isolation points and verify de-energisation of electrical circuits & equipment before continuing with works

Metal containment tray and conduit installed

- Create safe area to cut containment tray, uni-strut and drop rods into size
- Create safe area to cut and bend conduit to size
- Install anchor, drop rods, uni-strut, tray containment and conduit in approved route
- All containment to be level, allow sufficient space from obstructions above and any bends at 45 or 90 degrees

Install new distribution board

- Install new distribution board next to incoming supply
- Ensure distribution board level on wall
- Populate distribution board with outgoing devices/circuits, ensuring all correctly fitted and fastened

- Fit full form blanks to any unused outgoing ways
- Label incoming supply cables and file back any sharp edges where supply enters board
- Terminate cabling as per manufacturers spec and code of practice
- Complete all testing as per the requirements of BS7671 ensuring that all dead tests are carried out prior to energizing.
- Label all new circuits and provide schedule on circuits inside of board

Install lighting

- Mount lighting junction boxes
- Mount lighting control boxes
- Run new cables to specified locations using containment where provided
- Install light fixtures according to manufacturers specifications and approved layout
- Install emergency lighting according to approved layout
- Label distribution board and fittings accordingly

Underfloor small power

- Plan with site management the areas where removal of access tiles required for under floor power install
- Underfloor power tracks to be directly fixed to floor structure according to manufacturers spec
- Pull cables from drum to approved route and anchor in place according to manufacturers details
- Cables to be glanded into floor track termination boxes using the appropriate hand tools
- Pull and mount cables to wall locations using back boxes and allowing for 2nd fix
- Power modules to be plugged into power tracks when ready for 2nd fix
- Testing and Labelling to be completed

Installing small power above floor

- Chase walls for small power in accordance with latest drawings
- Install conduit / trunking along wall in locations noted in latest drawings
- Fit surface mounted back boxes to wall
- Fit recessed back boxes to wall
- Pull cables from drum to approved route, cables to be taped up and left coiled in back boxes allowing for second fix
- Face plates fitted to back boxes
- Testing and Labelling to be completed

Testing and commissioning

- Complete all testing as per codes of practice ensuring that all dead tests are carried out prior to energising
- Label all new circuits and provide schedule on circuits inside of board
- Provide emergency lighting certificates according to codes of practice for building control approval

Maintenance - PAT testing

- Ensure all appliances are isolated or unplugged
- Undertake visual inspection
- Undertake testing of appliance
- Fix appliances or tools as necessary and label
- Update site log book of those items that passed PAT testing
- Any items that failed testing to be removed from site

Maintenance - Emergency lighting test

- Walk around site checking that charging indicator lights are on
- Turn off supply to Emergency Lights using MCB or Test switch if fitted
- Walk around site checking that charging lights are now off and that main light is now alight (working via internal battery)
- In the case of duration tests the lights may need to stay alight for up to 3 hours, any lights that fail within this time requires attention
- Report findings to site maintenance team for them to repair/replace the emergency light

- Reinstate supply to Emergency Lights after given time. Function Test Only Immediately after Test / Repairs, 1 Hour Duration Test, after 1 Hour, 3 Hour Duration Test after 3 Hours
- Check charging lights are back on
- Supply Certificates / complete log book

1.2.11 Plumbing

Sign in and induction

- All operatives will arrive onsite and sign in at site office
- All operatives will undertake a site induction

Removal of existing plumbing services

- Isolating water supply at source
- Removal of internal fixtures and fittings
- Removal of exterior fixtures and fittings
- Remove all items from site according to site waste management plan

Containment tray installation

- Create safe area to cut containment tray, uni-strut and drop rods into size
- Install anchor, drop rods, uni-strut and tray containment in approved route
- All containment to be level, allow sufficient space from obstructions above and any bends at 45 or 90 degrees

Internal pipework installation

- Pipework delivered to a safe, pre-determined secure location onsite
- Erect access equipment in accordance with safe use of ladders guidance notes / erection of tower scaffolds
- Cut, bend and fit according to approved layout
- Pipework installed and tied to tray
- Install pipework to wall chasing
- Install pipework to wall surface using approved technical specs
- Locate fixture outlets according to working drawing
- Hot works to be organised and agreed with client management before undertaking work
- Refer to risk assessment for risks associated with hot works
- Insulate hot water pipes with the specified material

Underground pipework water supply installation

- Confirm location of extent of pipe works with site supervisor
- Mark pipe lines in ground according to working drawing and cordon off area
- Excavate trenches to required depths as per working drawings
- Excavation to be undertaken by others
- Prepare base of trench for laying pipes, as per technical specifications
- Lay the pipes on the prepared base and support them at adequate intervals
- Test the pipes for leaks under pressure in the presence of client’s representative
- Maintain a ‘test certificate’ duly signed by the representatives of the client and contractor
- Coat the pipes with the specified anti-corrosive treatment (if metal pipes are used)
- Provide encasement with sand/granular material, if specified
- Encasement undertaken by others
- Backfill trenches in layers including compaction
- Backfill undertaken by others

Underground sewerage & storm water pipework install

- Confirm location of extent of pipe works with site supervisor
- Mark pipe lines in ground according to working drawing and cordon off area
- Excavate trenches to required depths as per working drawings
- Excavation to be undertaken by others
- Prepare base of trench for laying pipes, as per technical specifications

- Lay the pipes on the prepared base, according to specified gradient and support them at adequate intervals
- Perform hydraulic/smoke test and obtain certification form client's representative
- Maintain a 'test certificate' duly signed by the representatives of the client and contractor
- Coat the pipes with the specified anti-corrosive treatment (if metal pipes are used)
- Provide encasement with concrete / sand/ granular material, as specified
- Encasement undertaken by others
- Backfill trenches in layers including compaction
- Backfill undertaken by others

Install fixtures and fittings

- Deliver fixtures and fittings to required areas following manual handling method statement
- Flush new pipework to remove debris or blockages
- Fit fixtures and fittings to their locations
- Fit kitchen cabinetry & fittings
- Fit bathroom cabinetry & fittings
- Fit shower fittings
- Fit water heaters
- Connect fixtures and fittings to power supply following risk assessment
- Fixtures and fittings to be connected to power supply by others
- Connect fixtures and fittings to water supply
- Connect fixtures and fittings to waste
- Clean all joints and apply silicone / mastic to specified areas

Test and commission

- Test the pipes for leaks under pressure in the presence of client's representative
- Perform hydraulic/smoke test and obtain certification form client's representative
- Maintain a 'test certificate' duly signed by the representatives of the client and contractor
- Chlorinate drinking water system

1.2.12 Gas & heating works

Purging of gas

- Risk assessment will be implemented and followed as a principle of safe working methods together with using IGE/UP/1A
- Ensure appliance to be worked on doesn't contain asbestos
- Engineer to confirm pipework complies with manufacturers specification and industry standards
- Engineer will record gas installation volumes
- Engineer will ensure sufficient earthing supply in place and isolate and disconnect all electrical connections to the unit after carrying preliminary checks
- Engineer will ensure sufficient ventilation in place
- Engineer will ensure system is clear of debris
- Engineer will remove any existing gas appliances and gas components as required
- Engineer will determine if any damage or defects to existing pipework or features by undertaking necessary tests
- Results should be recorded and property owner or client should be advised immediately before undertaking any further work
- Manometer to be positioned at inlet to system with engineer standing by keeping an eye on pressure and ready for emergency shutdown
- Gas should be released from purge point/vent stack and timed
- Half way through purge samples to be taken to test for gas concentration and purge to be aborted if gas / air concentration levels not satisfied
- Calculations of system recalculated and recored
- Nitrogen purging undertaken if gas / air concentration levels not satisfied
- Complete purge, equipment removed, leak / gas detection undertaken and commissioning of system

- Purge certificate provided

Removal of existing gas fixtures and fittings

- Protect client's property by placing a suitable dust sheet on the floor and place all tools and equipment on sheet ensuring nearby people are aware of where tools are laid
- Isolation of existing gas fixtures and fittings
- Ensure all pipework evacuated/purged before undertaking works
- Removal of all internal gas fixtures and fittings
- Removal of external gas fixtures and fittings
- Remove all items from site according to site waste management plan

Containment tray installation

- Create safe area to cut containment tray, uni-strut and drop rods into size
- Install anchor, drop rods, uni-strut and tray containment in approved route
- All containment to be level, allow sufficient space from obstructions above and any bends at 45 or 90 degrees

Internal pipework installation

- Pipework delivered to a safe, pre-determined secure location onsite
- Erect access equipment in accordance with safe use of ladders guidance notes / erection of tower scaffolds
- Cut, bend and fit according to approved layout
- Pipework installed and tied to tray
- Install pipework to tray and anchor to approved route
- Install pipework to finished surface using approved technical specs
- Locate fixture outlets according to working drawing
- Hot works to be organised and agreed with client management before undertaking work
- Refer to risk assessment for risks associated with hot works

Form a base or enclosure for plant

- Deliver formwork and associated materials to pre selected area for new concrete base
- Build necessary formwork, and lay steel reinforcement as instructed
- Pour concrete at least 100mm thick and cure according to engineers specification
- Lay pavers of at least 42mm to ground as base
- Form fire protected enclosure around plant according to specifications

Install fixtures and fittings

- Deliver fixtures and fittings to required areas following manual handling method statement
- Check appliance for clearances from surrounding units
- Check adequate stability, e.g. is there a stability bracket or a chain fitted to support fixture
- Fit fixtures and fittings to their locations
- Fit gas central heating systems
- Fit oil central heating systems
- Fit cookers
- Fit hot water heaters
- Connect fixtures and fittings to power supply following risk assessment
- Fixtures and fittings to be connected to power supply by others
- Visually check all inlets and ignition components
- Check any flame supervision devices
- Connect fixtures and fittings to water supply
- Connect fixtures and fittings to gas supply
- Connect fixtures and fittings to oil supply
- Carry out second tightness test as per gas safety regulations
- Operate appliance, checking and adjusting working pressure, flame supervision device, ignition components and flame picture according to manufacturers requirements
- Check ventilation requirements are met
- Carry out final operation checks

Changeover / Upgrade of domestic gas fired boiler and system

- Inspect property in relation to the survey and the customer requirements, i.e. boiler position, condensate termination, gas runs
- Prepare property for work, liaising with the house holder and colleagues as to the specific locations of applicants, location of tools, redundant materials, what area floor board are to be taken up, if access is required to loft space
- If working from height signage to be displayed internally and externally
- Protect customers property by installation of suitable floor covering, place all relevant tools and equipment in a safe position and ensure that all relevant people are made aware of their positioning. Protect other items in the premises
- Check installation is gas tight and check for signs of spillage in accordance with gas safety regulations. If found to be unsafe the correct procedure must be followed as per regulations
- Remove any existing heating components to be replaced and stored appropriately. If asbestos has been identified via a survey, specialist company to carry out removal and disposal as necessary
- Install boiler / flue / condensate pipes to manufacturers instructions, taking into consideration all factors e.g. plumbing from flue, discharging of condensate to soak ways, length / size of gas run, flue termination and support
- If appliance being changed is a back boiler unit remove back boiler unit and all associated pipework from the builders opening
- Upgrade controls to building regulations Part L if requried
- Install any extra radiators, any replacement valves as specified, run all pipe work with regards to the heating, electricity, water and gas with no small bore to be fitted
- Carry out checks for hot works or permit to work requirements
- Purge and relight any existing appliances
- Carry out visual risk assessment of existing appliances
- Fill the central heating system in accordance with manufacturers instructions and check for any water leaks
- Cold flush system using cleansing agent then hot flush the system
- Drain and refill system, adding corrosion inhibitor

Test and commission

- Lag pipework where necessary
- Test the pipes for leaks under pressure in the presence of client’s representative
- Perform hydraulic/smoke test and obtain certification form client’s representative
- Perform fault diagnosis, repeat if nessary
- Maintain a ‘test certificate’ duly signed by the representatives of the client
- Make good all holes and replace any removable surfaces back into their apertures
- Remove all redundant materials

1.2.13 Fire alarm systems

Isolate fire alarm loops

- Organise with client any special permits required for the isolation of live fire alarm system
- Isolate relevant detection loops
- Isolate voice alarm
- Isolate fire brigade direct dial system

Add to existing fire alarm

- Stripout redundant fire alarm cabling as specified
- Install new conduit or tray for fire alarm route
- Break into existing circuit and terminate new cables according to route
- Install heat detector smoke heads
- Install smoke detector smoke heads
- Install beam detectors
- Install void detection heads

- Check continuity of circuit

New fire alarm works

- Install new conduit or tray for fire alarm route
- Install new fire alarm cables to specified route
- Install heat detector smoke heads
- Install smoke detector smoke heads
- Install beam detectors
- Install void detection heads
- Check continuity of circuit

Commissioning fire alarm system

- Fault check fire alarm system
- Reactivate isolated circuits
- Configure fire alarm panel to accept new devices
- Add new devices to graphics system
- Test new devices for correct operation
- Provide test certificates to client
- Activate system leave in live state

1.2.14 Structured cabling systems

Sign in and induction

- All operatives will arrive onsite and sign in at site office
- All operatives will undertake a site induction

Removal of existing cabling

- Removal of existing network cabling
- Removal of existing telephony cabling
- Remove all items from site according to site waste management procedures

Metal containment tray and containment installation

- Create safe area to cut containment tray, uni-strut and drop rods into size
- Create safe area to cut trunking into size
- Install anchor, drop rods, uni-strut, tray containment and conduit in approved route
- All trunking and containment to be level, allow sufficient space from obstructions above and any bends at 45 or 90 degrees

Delivery of materials

- Delivery of cabling boxes to be coordinated with site supervisor, site management plan and refer to risk assessment for unloading and loading of vehicles
- All cabling boxes to positioned in a safe cordoned off area

Install cabling

- Lift raised access floor in direct area and cordon off area where floor has been removed
- Remove ceiling access tiles or panels for access above ceiling
- Pull cabling into agreed locations and fastened down
- Pull cabling and fasten into trunking, closing lid to trunking once complete
- Close raised access floor in local area as works proceed
- Close access ceiling or panels in local area as works proceed
- Any exposed cabling ends to be protected or covered throughout works

Equipment install

- All equipment to be delivered to a dust free predetermined area onsite
- Position of communications cabinets into specified place
- Fit out communications cabinet
- Install PABX system as per specification
- Installation of wireless access points
- Installation of patch panels

- Installation of UPS system
- Installation of fibre to communication cabinet
- Installation of satellite dish and associated equipment

Cable termination and labelling

- Terminate network cables at patch panels
- Terminate all outlets into RJ45 Modules at required positions
- Terminate all fibre optic cores using an Optical Time Domain Reflectometer (OTDR)
- Terminate all telephony cables
- All cables to be marked with the agreed labelling schedule
- Warranties and certificates provided
- Final inspection with client and handover

1.2.15 Security installation

Sign in and induction

- All operatives will arrive onsite and sign in at site office
- All operatives will undertake a site induction

Removal of existing cabling

- Removal of existing security cabling
- Removal of existing intruder alarm cabling
- Remove all items from site according to site waste management procedures

Delivery of materials

- Delivery of cabling boxes to be coordinated with site supervisor, site management plan and refer to risk assessment for unloading and loading of vehicles
- All cabling boxes to positioned in a safe cordoned off area

Metal containment tray and containment installation

- Create safe area to cut containment tray, uni-strut and drop rods into size
- Create safe area to cut trunking into size
- Install anchor, drop rods, uni-strut, tray containment and conduit in approved route
- All trunking and containment to be level, allow sufficient space from obstructions above and any bends at 45 or 90 degrees

Install cabling

- Lift raised access floor in direct area and cordon off area where floor has been removed
- Remove ceiling access tiles or panels for access above ceiling
- Pull cabling into agreed locations and fastened down
- Pull cabling and fasten into trunking, closing lid to trunking once complete
- Close raised access floor in local area as works proceed
- Close access ceiling or panels in local area as works proceed
- Any exposed cabling ends to be protected or covered throughout works

Equipment 1st fix

- All equipment to be delivered to a dust free predetermined area onsite
- Install security control system as per specification
- Install security control system to communications rack

Equipment 2nd fix

- Install emergency exit break glasses
- Installation of intruder burglar alarms
- Installation of turnstiles

Cable termination and labelling

- Terminate security cables at patch panels
- Terminate all security outlets at required positions
- All cables to be marked with the agreed labelling schedule

- Warranties and certificates provided
- Final inspection with client and handover

1.2.16 Drylining, plastering and tape jointing

Removal of existing dry lining

- Confirm with client location of dry lining to be removed
- Cut existing dry lining back to expose structural metal work
- Removal metal structural work in safe manner
- Lay materials in pre designated safe area
- Bag or place in designated bin all dry lining
- Bag or place in designated bin all structural steel
- Remove all materials according to site waste management place

Delivery of dry lining materials to site

- All dry lining materials to be delivered to site following arrival and departure from site risk assessment
- All dry lining materials to be manually handled to working areas according to the manual handling method statement

Form MF ceiling

- Allow other trades to complete first fix of services
- Install metal supports or hangers to structural soffit
- Install metal hangers and MF ceiling supports
- Install plasterboard to ceiling as per approved layout
- Install beading or edge details to plasterboard
- Cut holes for fixtures and fittings as per approved layout

Form plasterboard partitions

- Mark on floor new partition set out according to drawing
- Fix top and bottom track for stud wall
- Measure and cut studs, installing at 600mm centres
- Form studding around door frames and allowing for timber lining in frames
- Allow for services first fix
- Apply dry lining sheeting according to client specification

Fibrous plaster mouldings 1st fix

- All fibrous casts to be laid out according to their reference numbers and specific position
- Fibrous casts will be predrilled and countersunk in locations to align with background noggins and bearers

Mixing compounds

- Add compounds to bucket of clean water according to supplier specifications
- Mix compounds by hand or by machine in a safe area

Apply plaster/jointing compounds to surface

- Erect access equipment in accordance with safe use of ladders guidance notes / erection of tower scaffolds
- Prepare surfaces
- Apply multiple coats of compound to wall using beads and trims at corners / edges
- Rub down surface by hand or with machine
- Final coat to all areas
- Rub down and prepare surface for decorations
- Dispose of waste material according to site waste management plan

Fibrous plaster mouldings 2nd fix

- Erect access equipment in accordance with safe use of ladders guidance notes / erection of tower scaffolds
- Mixing compound is applied to fixing points and backs of casts
- Casts to be lifted into correct and level position

- Fibrous casts to are fixed with screws and mitred joints to be made good
- Final making good to all areas
- Final rub down and prepare surface for decorations
- Dispose of waste material according to site waste management plan

1.2.17 Suspended ceiling works

Sign in and induction

- All operatives will arrive onsite and sign in at site office
- All operatives will undertake a site induction

Preliminary works

- Agree upon programme of works, specific finishes like and firm finish date
- Ensure all trades working from latest reflected ceiling plans and that drawings take into account any visible obstructions or services
- Setting out points and elevation benchmarks are identified and related to design/layout drawings
- Design dimensions are checked against actual construction
- The proposed ceiling module layout is checked for inconsistencies

Removal of suspended ceiling

- Isolation of 2nd fix of ceiling fittings by others and following isolation risk assessments
- Carefully remove ceiling tiles being aware of any debris that may be resting on top of tiles
- Remove any acoustic, fire rated barriers above ceiling and strip ceiling grid in small sequential sections
- Removal of ceiling hangers and perimeter track
- All materials to be placed in designated areas ready for removal from site
- Carefully remove plasterboard from ceiling grid, being aware of any debris that may be resting on top of ceiling

Suspended ceiling install

- Finished ceiling heights demarcated and will take into account installed services and required clearance
- The ceiling will be set out with string lines and/or lasers establishing ‘square’ reference lines
- Perimeter detail to be installed at agreed level
- Fixings into the structural soffit are fitted with hangers then attached
- Hangers to be levelled by ceiling engineers
- The ceiling grid is installed and panels placed in grid
- Acoustic cavity barriers to be installed above agreed partitions
- Fire cavity to be installed above agreed partitions
- Apertures ceiling mounted items such as down lights to be cut out
- 2nd fix of ceiling fittings by others

1.2.18 Floor and wall tiling

Sign in and induction

- All operatives will arrive onsite and sign in at site office
- All operatives will undertake a site induction

Removal of existing tiles

- Manually remove tiles from surface using hand tools
- Mechanically remove tiles from surface
- Waste material to be removed from site

Surface preparation

- Thorough clean, and hoover of area to be undertaken and removal of debris from floor
- Ply sheeting or similar to be used to even out discrepant surface levels and checked against datum or level
- Check and survey site, layout marking and setting
- Edge restraint to be installed to restrain lateral movement of tiles
- Mixing of Latex Screed in safe, predesignated area with correct PPE

- Floor is screeded using a Latex Screed with a trowel
- Area cordoned off until supervisor has agreed screed now safe to walk on

Ceramic or stone floor tile installation

- Area cordoned off preventing unauthorised access
- Floor tiles to be distributed to tiling area by trolley
- Floor tiles to be unloaded to areas where user can safely grab without twisting
- Floor tiles to be cut on manual cutter
- Floor tiles to be cut on mechanical cutter
- Floor tiles laid according to set out, tapped by mallet ensuring straight, level and grout spaces even
- Allow tiles to set
- Approved grout to be worked over tiles, ensuring worked well into joints and excess wiped clean from tile surfaces
- Area to be cordoned off, allowing grout to cure for 48 hours

Ceramic or stone wall tile installation

- Area cordoned off preventing unauthorised access
- Wall tiles to be distributed to tiling area by trolley
- Wall tiles to be unloaded to areas where user can safely grab without excessive twisting
- Mix portland and adhesive cement in predesignated area
- Wall tiles to be cut on manual cutter
- Wall tiles to be cut on mechanical cutter
- Wall tiles laid according to set out, tapped by mallet ensuring straight, level and grout spaces even using spacers
- Allow tiles to set
- Approved grout to be worked over tiles, ensuring worked well into joints and excess wiped clean from tile surfaces

Sign off

- Review tile surfaces for cracks or defects and replace as necessary
- Clean down all tile surfaces
- Sign off from client or principal contractor
- Remove all waste from site

1.2.19 Painting and decorating

Sign in and induction

- All decorators will arrive onsite and sign in at site office
- All decorators will undertake a site induction

Interior decorations

- Erect access equipment in accordance with safe use of ladders guidance notes / erection of tower scaffolds.
- Prepare surfaces
- Apply primer or undercoat
- Rub down surface
- Second coat of paint

Interior decorations - paint spraying

- Prepare surfaces
- Protect areas as needed to reduce paint overspray
- Ensure areas are clear for work & Well Ventilated
- Isolate any live fire detection systems
- Wear protective clothing and breathing apparatus
- Spray interior walls/ceiling with applicator

Painting to floor

- Prepare surface for decorating using water until the desired substrate is met

- Prepare surface for decorating using vapour jet until the desired substrate is met
- Prepare surface for decorating using vapour jet shot blasting / milling until the desired substrate is met
- Fill holes and level off gradations in base material
- Mix paints, primers and activators according to suppliers spec
- Apply paint to floor using rollers and brushes
- Remove paint and materials from site once works complete

Exterior decorations

- Erect access equipment in accordance with safe use of ladders guidance notes / erection of tower scaffolds.
- Use exterior scaffolding erected by a competent scaffolder
- Strip, prepare and make good surfaces
- Rub down surface
- Apply primer or undercoat
- Second coat of paint

1.2.20 Catering equipment installation

Electrical Isolations

- Verify if permit to work required
- Place warning notices and secure areas where isolations are to be undertaken
- Conduct fault diagnosis using approved test instruments
- Identify isolation points and verify de-energisation of electrical circuits & equipment
- Lock off isolations to eliminate accidental re-energising

Removal of existing services

- Removal of existing LV cabling
- Removal of all redundant electrical cabling
- Isolation of existing gas fixtures and fittings
- Ensuring all pipework evacuated before undertaking works
- Removal of all internal gas fixtures and fittings
- Removal of external gas fixtures and fittings
- Isolating water supply at source
- Removal of internal plumbing fixtures and fittings
- Removal of exterior plumbing fixtures and fittings
- Remove all items from site according to site waste management procedures

Metal containment tray and conduit installed

- Create safe area to cut containment tray, uni-strut and drop rods into size
- Create safe area to cut and bend conduit to size
- Install anchor, drop rods, uni-strut, tray containment and conduit in approved route
- All containment to be level, allow sufficient space from obstructions above and any bends at 45 or 90 degrees

Pipework installation

- Pipework delivered to a safe, pre-determined secure location onsite
- Erect access equipment in accordance with safe use of ladders guidance notes / erection of tower scaffolds
- Cut, bend and fit according to approved layout
- Pipework installed and tied to tray
- Install pipework to tray and anchor to approved route
- Install pipework to finished surface using approved technical specs
- Locate fixture outlets according to working drawing
- Hot works to be organised and agreed with client management before undertaking work
- Refer to risk assessment for risks associated with hot works

Install low voltage lighting or similar

- Run cabling to specified locations using containment where provided
- Install light fixtures according to manufacturers specifications and approved layout
- Label distribution board and fittings accordingly

Install small power

- Agree small power route with site management
- Pull cables from drum to approved route and anchor in place according to manufacturers details
- Cables to be terminated using the appropriate hand tools
- Pull and mount cables to wall locations using back boxes and allowing for 2nd fix
- Testing and Labelling to be completed

Install fixtures and fittings

- Deliver fixtures and fittings to required areas following manual handling method statement
- Flush new pipework to remove debris or blockages
- Fit kitchen cabinetry & fittings
- Fit other fixtures and fittings to their locations
- Fit cookers
- Fit hot water heaters
- Connect fixtures and fittings to power supply following risk assessment
- Fixtures and fittings to be connected to power supply by others
- Connect to fixtures and fittings to water supply
- Connect to fixtures and fittings to gas supply
- Connect to fixtures and fittings to waste

Test and commission

- Complete all electrical testing as per codes of practice ensuring that all dead tests are carried out prior to energising
- Label all new circuits and provide schedule on circuits inside of board
- Test new gas pipework for leaks under pressure in the presence of client's representative
- Perform hydraulic/smoke test on new gas pipework and obtain certification form client's representative
- Perform fault diagnosis, repeat gas testing and commissioning process until signed off
- Maintain a 'test certificate' duly signed by the representatives of the client and contractor for new gas pipework
- Chlorinate drinking water system

1.2.21 Locksmith

Repair / replacement / new lock

- Gain any permits to work, contractor passes and/or sign into site to meet with the clients and be made aware of site procedures (For non domestic only)
- Operatives will wear at all times necessary safety/protective clothing, eg overalls, safety hat, safety glasses/goggles, gloves, safety boots and ear defenders
- Check the functioning of the existing lock, if parts can be replaced, replace otherwise replace complete unit
- Ensure that electrical power supply is available and connect any required extension leads to the working area
- Ensure lock fits in rebate without any pressure
- Ensure lock catches properly in doorframe and that there is no pressure on the bolt or latch whatsoever as door is closed
- All electrical equipment will have all current test certification on request
- Waste to be removed and recycled

1.2.22 Glazing

General

- Prior to any work, the properties Asbestos Register (Management Survey) should be checked and/or any presumed asbestos containing material sampled and checked. No work should disturb any asbestos material. All employees must have attended Asbestos Awareness Training and know the procedures to follow if they discover any material that could be asbestos containing
- Prior to the commencement of work the sizes, type and condition of all windows and doorsets should be checked both against the survey sizes and types and against the actual aperture sizes
- The client/customer should be given adequate notice to remove any furniture, fixtures or fittings that may otherwise be damaged during the installation
- The installer is responsible for both internal and external protection of the property during the installation work
- Floor coverings should be protected and care afforded to decorations and furnishings
- Reasonable steps should be taken to minimise any damage to adjacent reveals
- Wherever possible, the installer should install and seal the new windows and doorsets on the same day that the existing windows or doorsets are removed, to maintain security and weather tightness of the building. If this is not possible, an alternative arrangement for security and weather tightness should be agreed in advance between installer and client
- The existing windows and doorsets should be removed with care to avoid unnecessary damage to the building structure and its finishings and without permitting any subsidence of the superstructure during or after the installation procedure
- Any electrical or specialist items, such as television aerials or telephone wires should be re-routed around the frame of the window. Where this is not feasible, then alternatives should be agreed with the customer. The appropriate service provider should be employed where necessary

Delivery of materials to site

- Delivery of materials to be unloaded in safe and predesignated unloading area
- Removal of materials from delivery vehicle to be undertaken according to manual handling method statement
- Delivery and load out of materials to follow risk assessments and manual handling method statement
- Materials to be stored in safe and secure manner according to handling glass risk assessment

Removal of glazing or glazing systems

- Remove framing or glazing system using hand tools
- Follow manual handling method statement when handling glass
- Dispose of glass and components according to site waste management plan

Removal of timber framed windows and doors

- Opening casements should be removed first, complete with their glass, by levering the screws from the frames, by unscrewing the hinges, or by cutting through the hinges
- After removal of the casements and fixed light glazing, any mullions and transoms should be cut through and removed from the outer frame of the window
- If the frame fixing nails or screws cannot be found and removed, it will be necessary to cut through the outer frame at an angle which will allow it to be carefully levered from the surrounding aperture - in the plane of the window - so as to cause the minimum of damage to the aperture
- There are often problems with windows under the roof eaves. There may be a brick course resting on the existing frame between the top of the frame and the soffit board. This course is often purely decorative - not load-bearing - and should be wedged into position until the frame has been removed. Also the soffit board - plywood, timber or asbestos cement is frequently nailed to the existing window frame. This joint should be severed by carefully locating and removing or cutting the nails

Removal of Box-sash windows

- Most box-sash windows pre-date cavity walls, and are built into the internal reveals of solid brickwork. The sashes can be removed fully glazed
- Remove the mitred beading from around the frame

- Carefully cut the sash cords to release and lower the weights
- Remove the bottom sash, take off the parting bead and then take out the top sash
- Cut the outer frame from the aperture, leaving the horns in the structure
- Remove the counterweight from the sash box
- Remove the sub-sill, if this is not part of the outer frame

Removal of roof windows

- Remove sash from frame
- Roofing material and flashing are then removed from around the frame to expose the fixing brackets
- Remove screws securing the brackets to the roof structure and remove the frame
- At this point the internal lining will either be left in place or removed depending on re-installation principle

Installation of timber windows and doors

- Corner jamb fixings should be between 150 mm and 250 mm from the external corner
- Intermediate fixings should be at centres no greater than 600mm
- There should be a minimum of two fixings on each jamb
- On windows over 1800 mm wide, central head and sub-sill fixings should be provided

Install door glazing

- Ensure substructure ready for supporting weight of glazed door
- Install door frame
- Cut out and install door pivot box under floor
- Cut out and install door pivot box above ceiling
- Fit and install glass door to pivots or frame
- Clean down glass
- Apply manifestation and clean

Install window glazing

- Ensure cutouts and structure secure for window frame install
- Install glazing frames according to frame specification
- Install window components and beads
- Install glazing and component to window frame

Window and door fixing

- For correct window and door fixing, each frame member should be fixed to the structure or to an adjacent frame in order to resist all likely imposed loads which could cause the frame to deflect
- These loads might be due to wind loads, operating loads, weight, accidental impact or attempted burglary
- Fixing methods are affected by the presence or absence of a wall cavity, the nature and condition of any cavity, the relative position of the frame and cavity, the design of the reveal, any requirements for fire resistance (timber frame) or the position of the plaster line and the need to minimise disturbance and damage to interior decorations

Open cavities

- Any open cavities discovered between inner and outer skins of brick or blockwork should be closed with an insulating material
- Care should be taken to maintain the integrity of the DPC and adequate purchase for fixing screws should be ensured, if necessary with extended fixing lugs

Glazing

- All glazing should conform to the recommendations given in the relevant part of BS 6262 and in BS 8000-7. In addition, any glass or insulating glass unit manufacturer’s instructions should be followed
- All insulating glass units should be examined for damage prior to installation and defective units should not be used
- Insulating glass units incorporating safety glass should be oriented with the safety glass on the appropriate side

- Insulating glass units incorporating safety glass should be oriented with the safety glass on the appropriate side
- Insulating glass units incorporating safety glass should be oriented with the safety glass on the appropriate side Insulating glass units with low emissivity coatings should be oriented in accordance with the manufacturer's instructions. Failure to do so can render the coating less effective
- Many windows and doorsets are delivered ready-glazed. Alternatively they can be supplied with glass units and pre-formed glazing gaskets to be applied on site in accordance with the manufacturer’s instructions
- Some systems require butyl-based, polyethylene, PVC or acrylic glazing tapes. When used externally, these glazing tapes should be capped with silicone sealant
- Other systems use non-setting compounds, gun-grade solvent release sealants, one or two part curing sealants or two part rubberizing compounds
- In all cases the manufacturer's instructions should be followed
- Insulating glass units should be installed in accordance with BS 8000-7, requiring, where appropriate, the correct use of setting and location blocks, distance pieces, frame to glass and bead to glass gaskets, bead to frame air seals, corner sealing blocks, beads and bead end caps, and bedding and capping sealants

Finishing off and making good

- Debris or contaminants should be removed and any drainage paths should be cleared
- Internal reveals should be made good as agreed, ready to redecorate if necessary
- Any materials such as trims or sealant should not be applied on top of loose material
- Protective tapes should be removed as soon as practicable, as ageing of tapes can cause difficulties in removal. Refer to the manufacturer's guidance
- Sand and cement should not be used to fill the gap between the outer frame and the substrate except for backfill for steel windows, usually limited to windows in stone surrounds or interior fair-faced brick and concrete
- Where the replacement product has a smaller front to back dimension than the original, there might be a mastic and/or paint line visible on the substrate which should be removed as much as practicable or covered with a trim
- The method of, and responsibility for, repair to any render should be as agreed with the client/customer

Sealing

- The purpose of perimeter sealants is to repel water and prevent air leakage in the face of differential movement between the aperture and the window
- Suitable sealants exhibit and retain flexibility
- Sealants should be compatible with the frame, substrate and other materials with which it may come into contact
- The presence of old oil-based mastics and bituminous DPC’s can adversely affect the behaviour or appearance of otherwise correctly specified and applied sealants through the migration of hydrocarbons to the surface of the new sealants. Consequent photo-oxidation of the migrant products can affect sealant performance and produce discoloration. This risk should be avoided by removal of unwanted mastic and by keeping sealant away from DPC's
- Perimeter joints should be sealed on both the outside and the inside, with a sealant appropriate to the frame surface the substrate material, joint size and configuration, anticipated joint movement and anticipated exposure to weather
- In situations where sealants rely upon atmospheric moisture to initiate curing, deep filling should be avoided
- The sealant should be applied against a firm backing e.g. foamed PE rod, so that it is forced against the sides of the joint during application
- To avoid failure in service, the sealant should not adhere to the backing because this would restrict the lateral movement of the joint. This can be achieved through the use of a closed-cell foam strip such as a polyethylene foam tube
- Wherever practicable, an insulating fill should be inserted or injected around the full perimeter of the frame, between the frame and the structural opening

- Any insulation should be sufficiently flexible that it does not interfere with any expansion and contraction of the frame

Finishing off installed hardware & fittings

- Oil or light grease should be applied to mechanisms
- A thin film of light oil on friction stays and mechanisms will enhance their corrosion resistance
- Residential door hinges with plastics bushes require no lubrication. The low-friction bushes could be damaged by the application of mineral oil over the long term
- Vertical slider spring balances are pre-lubricated and should require no maintenance
- When using spring balances, care must be taken to avoid any lubricant being applied or transferred to the spring balance chambers in the frame. Any such lubricant will impede the effectiveness of the pivot shoe locking system, causing the sash to move around when tilted inwards for cleaning.
- Caution is required when using solvent based aerosol lubricants as these may cause damage to the frame material. If in doubt, further advice should be sought from the frame supplier
- Brass metal rapidly tarnishes when exposed to the atmosphere and requires regular polishing. To avoid this, solid brass furniture is usually supplied coated with a protective lacquer to keep it bright. However, if the lacquer becomes scratched or worn away then the underlying brass will naturally tarnish. Advice on removing and re-applying lacquer to brass furniture should be sought from the supplier

Cleaning glass

- Cleaning of glass can be carried out using a solution of detergent in warm water
- Less heavily soiled glass surfaces can be cleaned using a soft cloth and proprietary glass cleaner, in accordance with the manufacturer’s instructions
- Laminated, toughened, leaded or low-E glass, and units containing Georgian bars, can all be cleaned in a similar manner
- The glass used in double glazed units can be easily scratched especially by jewellery and metallic scrapers. It is therefore recommended that hand jewellery is removed prior to cleaning and the use of such scrapers be avoided
- Care is required when cleaning leaded lights as excessive pressure can dislodge the lead from the glass surface
- Care should be taken not to damage the seals between the frame and the glass
- Externally exposed lead will oxidise - this is a natural phenomenon and does not indicate a fault with the material

Final Inspection

- After installation a final inspection should be carried out to ensure that the installation is fully in accordance with the surveyor's and manufacturer's instructions and that the products operate correctly
- The client/customer should be made aware of the method of operation, locking and unlocking and fire egress
- Written operating and maintenance instructions should be provided
- Information on the ordering of spare keys should be provided
- It is good practice to have the client/customer sign off the installation after the inspection has been passed

1.2.23 Cleaning

Sign in and induction

- All operatives will arrive onsite and sign in at site office
- All operatives will undertake a site induction

Inspection and access onto roof

- Remote inspection using mast photography or videography where only visual inspection is required
- Follow risk assessment to eliminate any inherent risks when accessing the roof is required
- All safety precautions in risk assessments to be followed
- Those accessing roof should have relevant training
- Erect barriers at ground level to create a work area the point of access to the roof to prevent access by staff or members of the public

- Use boom lift to inspect or access roof
- Erect mobile access equipment or a secured tower scaffold to inspect or access
- Use fixed scaffolding to access roof
- Ensure adequate edge protection to roof has been provided
- Use dedicated access to roof if available

Cleaning of internal space

- Removal of rubbish and debris
- Full cleaning of all rooms in house
- Final show room clean and polish to all rooms in the house
- Full cleaning of all rooms in commercial space
- Final show room clean and polish to all rooms in commercial space
- Final show room clean to bathrooms
- Final show room clean to kitchens
- Cleaning of ceiling tiles
- Cleaning of all fixtures and fittings
- Shampoo carpets
- Hoover of carpets
- Polishing of floor tiles

1.3 Risk assessment register

- 2.1 Exposure to sewage rats and vermin - page 54
- 2.2 Working around live electrical equipment - page 55
- 2.3 Preventing exposure to asbestos fibres - page 56
- 2.4 Working in areas of high volume of movement - page 56
- 2.5 Working out of hours - page 57
- 2.6 Lone working - page 58
- 2.7 Working within risers - page 59
- 2.8 Arrival & departure from site - page 60
- 2.9 Preventing slips, trips and falls - page 62
- 2.10 Young people at work - page 63
- 2.11 Working in confined spaces - page 64
- 2.12 Working with or around combustible materials - page 65
- 2.13 Working in noisy environments - page 66
- 2.14 Working in dusty environments - page 67
- 2.15 Working with or around mould spores - page 68
- 2.16 Contact with electricity from overhead power sources - page 69
- 2.17 Delivery of materials - page 70
- 2.18 Visually impaired people at work - page 71
- 2.19 Using portable power tools - page 72
- 2.20 Using vibrating machinery - page 73
- 2.21 Using disc cutters - page 74
- 2.22 Using abrasive wheels - page 76
- 2.23 Using vehicles onsite - page 78
- 2.24 Using tipper lorries and lorry loaders - page 81
- 2.25 Using hand tools - page 82
- 2.26 Using cartridge tools - page 83
- 2.27 Plant lifting operations - page 85
- 2.28 Using airless sprayer - page 86
- 2.29 Using nail guns - page 87
- 2.30 Using blow lamp or similar - page 88
- 2.31 Using mapress machine - 110v - page 89
- 2.32 Mobile generator - page 90
- 2.33 Working on fixed scaffolds - page 92
- 2.34 Working within lofts - page 94
- 2.35 Working on sloping roofs - page 95
- 2.36 Working on flat roofs - page 96
- 2.37 Working on fragile roof structures at height - page 97
- 2.38 Working from step ladders - page 99
- 2.39 Using personal fall arrest / fall restraint equipment - page 101
- 2.40 Preventing falling debris or tools from height - page 102
- 2.41 Working on podium steps - page 103
- 2.42 Using ladders - page 104
- 2.43 Working by or over skylights - page 106
- 2.44 Pitched roof ladder access - page 107
- 2.45 Rescue plan - page 108
- 2.46 Movement of boxed materials - page 111
- 2.47 Moving of general materials of normal size and shape - page 112
- 2.48 Moving pipes, rolls or irregular shaped or sized materials - page 113
- 2.49 Cable pulling - page 114
- 2.50 General carpentry works - page 115
- 2.51 Buried services - page 117

- 2.52 Delivery and collection of scaffolding - page 120
- 2.53 Erecting / dismantling scaffolding systems - page 121
- 2.54 Raising / lowering materials by Ginny wheel and rope - page 124
- 2.55 Excavation - page 125
- 2.56 Demolition of brickwork - page 128
- 2.57 Safe storage of steel - page 129
- 2.58 Welding - page 130
- 2.59 Pouring concrete - page 134
- 2.60 Using concrete blocks - page 136
- 2.61 Structural steel demolition - page 137
- 2.62 Installation of Metsec SFS - page 138
- 2.63 Working with lead - page 140
- 2.64 General masonry works - page 142
- 2.65 Installation of roof trusses - page 143
- 2.66 Installing timber joists - page 144
- 2.67 Working with clay roof tiles - page 145
- 2.68 Asphalt heating and transportation - page 146
- 2.69 Using floor sander - page 147
- 2.70 Charging or decanting synthetic refrigerant - page 149
- 2.71 Condenser installation - page 150
- 2.72 Testing pressure systems - page 151
- 2.73 Thermal & acoustic insulation to pipework - page 151
- 2.74 Charging or decanting ammonia refrigerant - page 152
- 2.75 Repairs to manholes and live drains - page 154
- 2.76 Copper pipework installation - page 155
- 2.77 Ductwork installation - page 156
- 2.78 General plumbing works - page 157
- 2.79 Fan coil unit works - page 158
- 2.80 Drilling into Artex textured surface - page 159
- 2.81 Air handling unit works - page 161
- 2.82 Electrical testing and commissioning - page 162
- 2.83 Removal of existing electrical services - page 163
- 2.84 Electrical work up to 400 volts - page 164
- 2.85 PAT testing of appliances or tools - page 165
- 2.86 Installing new distribution board - page 166
- 2.87 Installing new lighting - page 167
- 2.88 Electrical isolations - page 168
- 2.89 Installation of cabling - page 169
- 2.90 Pipe threading / grooving machines - page 170
- 2.91 Gas fittings and fixtures works - page 171
- 2.92 Testing and commissioning fire alarm system in occupied space - page 172
- 2.93 General plastering / tape & jointing works - page 172
- 2.94 Preparing surfaces for decorations - page 173
- 2.95 Suspended ceiling works - page 174
- 2.96 Mixing and applying floor preparation products - page 175
- 2.97 Using mechanical tile cutter - page 176
- 2.98 Transporting materials and tools - page 178
- 2.99 Installation of new flooring systems - page 180
- 2.100 Disposal of waste materials - page 181
- 2.101 General painting works - page 182
- 2.102 General locksmith works - page 183
- 2.103 Handling and installing glass - page 184
- 2.104 Laying of brick or block paving - page 185

- 2.105 Laying tarmacadam - page 186
- 2.106 General cleaning works - page 188
- 2.107 Operating pressure washing plant - page 190
- 2.108 Installation of cable trunking and trays - page 192

1.4 Supervision and personnel

Sorin Voicu - Site Manager

Dean Willars - Architect

Cristina Voicu - CDM and Health & Safety Executive

Ionel Ganea - Site Supervisor

Paul Greig - Electrician

Terran Francis - Electrician

Stewart Smith - Scaffolder

Kevin Woolner - Plumber

Ion Dumitrascu - Tiler

Ilie Iliescu - Bricklayer

Jack Blacksmith - Plasterer

Costel Ganea - Carpenter

Aurel Predescu - Carpenter

Gheorghe Draghici- Bricklayer

Costy Keough - Carpenter

Bogdan Pistritu - Groundworker

George Ceausila - Groundworker

Christo Ganz - Painter

Vasile Lupu - Handyman

Danny Sima - Handyman

Bebeto Rossi - Handyman

Claudiu Iliescu - Labourer

Lucian Mahary - Labourer

Florin Jonas - Labourer

1.5 Training

All operatives are adequately trained to carry out required tasks.

Site operatives hold current certification and have the following training:

- CSCS certification
- The Construction Industry Scaffolders Record Scheme (CISRS)
- Working at heights training
- Asbestos awareness training
- Installing edge protection
- Mobile Elevating Work Platforms (MEWPs): IPAF
- Installing and wearing harness systems (including rescue procedures)
- All operatives are apprenticeship served electrical engineers
- All operatives are apprenticeship served plumbing engineers

1.6 Legislation

- Health and Safety Work Act 1974
- The Management of Health and Safety at Work Regulations 2006
- Workplace (Health, Safety and Welfare) Regulations 1992
- The Control of Asbestos Regulations 2012
- Provision and Use of Work Equipment Regulations (PUWER) 1998
- The Reportable Injuries Diseases & Dangerous Occurrence Regulations 2013 (RIDDOR)
- Control of Substances Hazardous to Health Regulations 2002
- The Work at Height Regulations 2005
- The Personal Protective Equipment at Work Regulations 2002
- The Manual Handling Operations Regulations 1992
- The Construction (Design and Management) Regulations 2015
- The Provision and Use of Work Equipment Regulations 1998
- The Electricity at Work Regulations 1989
- The Gas Safety (Management) Regulations 1996
- The Pipelines Safety Regulations 1996
- New Roads and Street Works Act 1991
- Electricity Safety Quality and Continuity Regulations 2002
- The Road Vehicles (Construction and Use) Regulations 1986 SI 1986/1078
- Supply of Machinery (Safety) Regulations 1992
- Fire and Rescue Services Act 2004
- The Hazardous Waste Regulations 2005
- The Pressure Systems Safety Regulations 2000
- Pressure Equipment Regulations 1999 (SI 1999/2001)
- The Environmental Protection Act 1990
- F-Gas Regulation (EC) 517/2014
- Ozone Depleting Substances Regulation (EC) 2037/2000
- FF-Gas Regulation (EC) 517/2014
- The Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)
- The Building Regulations England and Wales 1991 Part N ‘Glazing – materials and protection’

1.7 Codes of practice

1.7.1 Fire stopping systems

- Approved Document B3 (Internal fire spread (structure)) of the Building Regulations 1991 for England and Wales

1.7.2 Cleaning

- BS 8221-1:2012 Code of practice for cleaning and surface repair of buildings
- BS8454:2006 Code of practice for the delivery of training and education for work at height and rescue
- BS 8437:2005 Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the workplace
- BS 7883:2005 Code of practice for the design, selection, installation, use and maintenance of anchor devices conforming to BS EN 795
- BS EN 13374:2004 Temporary edge protection systems. Product specification, test methods

1.7.3 Paving and ground surface works

- BS 7533-3:2005+A1:2009
- Pavements constructed with clay, natural stone or concrete pavers. Code of practice for laying precast concrete paving blocks and clay pavers for flexible pavements

1.7.4 Glazing

- BS 6262:1982 Code of practice for glazing for buildings
- BS 6262: 'Code of practice for glazing for buildings' Part 4: 1994 'Safety related to human impact'
- BS 6206:1981 'Specification for Impact Performance Requirements for Flat Safety Glass and Safety Plastics for use in Buildings'

1.7.5 Catering equipment installation

- BS EN 729 : quality requirements for welding. Fusion welding of metallic materials
- BS EN 1090-1:2009+A1:2011 Execution of steel structures and aluminium structures, technical requirements for steel structures
- BS 1494 : specification for fixing accessories for building services
- BS 4320 : 1968 : specification for metal washers for general engineering purposes. Metric series
- BS 4395 : specification for high strength friction grip bolts and associated nuts and washers for structural engineering
- BS 4592 : industrial type flooring, walkways and stair treads
- BS 4604 : specification for the use of high strength friction grip bolts in structural steelwork. Metric series
- BS 5531 : 1988: code of practice for safety in erecting structural frames
- BS 5950 : structural use of steelwork in building
- BS 6187: 2011 Code of practice for full and partial demolition
- BS 6399 : loading for buildings
- BS 7121: 2000 Code of practice for safe use of cranes Part 1: General; Part 2: Mobile cranes; Part 4: Lorry loaders
- BS 8202 : coatings for fire protection of building elements
- BSI 5784 for commercial catering equipment
- BS 6173:2009 Specification for installation and maintenance of gas-fired catering appliances

1.7.6 Painting and decorating

- BS 8000-12:1989 Workmanship on building sites - Code of practice for decorative wallcoverings and painting.
- BS BS 6150:2006 Painting of buildings - Code of practice.
- BS 7079:2009 General introduction to standards for preparation of steel substrates before application of paints and related products.

1.7.7 Floor and wall tiling

- BS 8000-11:2011 Workmanship on building sitesInternal and external wall and floor tiling. Ceramic and agglomerated stone tiles, natural stone and terrazzo tiles and slabs, and mosaics
- BS 5385-1:2009 Wall and floor tilingDesign and installation of ceramic, natural stone and mosaic wall tiling in normal internal conditions

1.7.8 Suspended ceiling works

- BS EN 13964: 2004 Suspended ceilings. Requirements and test methods

1.7.9 Drylining, plastering and tape jointing

- BS 5492:1990 Code of practice for internal plastering.
- BS 8481: 2006 Design, preparation and application of internal gypsum, cement, cement and lime plastering systems - specification.
- BS 8000: Workmanship on building sites Part 10: 1995 Code of Practice for plastering and rendering.
- BS EN 13279-1: 2005 Gypsum binders, and gypsum plasters - Definitions and Requirements.
- BS EN 13914-2: 2005 Design, preparation and application of external rendering and internal plastering.
- BS EN 13963: 2005 Jointing Materials for gypsum plasterboards - Definitions, Requirements and Test Methods.
- BS EN 14496: 2005 Gypsum based adhesives for Thermal / Acoustic insulation composite panels and plasterboards - Definitions, Requirements and Test Methods.
- BS EN 13658-1: 2005 Metal lath and beads - Definitions, Requirements and Test Methods - Internal Plastering.

1.7.10 Security installation

- BS EN 50131-1:2006+A1:2009 standard in accordance with PD6662:2010
- BS8243:2010 for police calling systems

1.7.11 Structured cabling systems

- BS EN 61280-4-2:2000, IEC 61280-4-2:1999 Fibre optic communication subsystem basic test procedures.
- BS EN 61280-4-1:2009 Fibre optic communication subsystem basic test procedures.
- BS EN 61300-3-35:2010 Fibre optic interconnecting devices and passive components. Basic test and measurement procedures.
- BS EN 50174-1:2009+A1:2011. Information technology. Cabling installation. Installation specification and quality assurance.
- PD IEC/TR 62627-01:2010 Fibre optic interconnecting devices and passive components. Fibre optic connector cleaning methods.
- TIA-568: Commercial Building Telecommunications Cabling Standards.
- TSB67: Field Testing of Generic Cabling.

- FIA-TSD-2000-4-2-2.

1.7.12 Fire alarm systems

- BS 5839-6:2013 Fire detection and fire alarm systems for buildings. Code of practice for the design, installation, commissioning and maintenance of fire detection and fire alarm systems in domestic premises.
- BS 5839-1:2013 Fire detection and fire alarm systems for buildings. Code of practice for design, installation, commissioning and maintenance of systems in non-domestic premises.
- BS 5839-8:2013 Fire detection and fire alarm systems for buildings. Code of practice for the design, installation, commissioning and maintenance of voice alarm systems.
- BS 5839-3:1988 - Specification for automatic release mechanisms for certain fire protection equipment.
- BS 5839-5:1988 - Specification for optical beam smoke detectors.
- BS 5839-9:2011 - Code of practice for the design, installation, commissioning and maintenance of emergency voice communication systems.

1.7.13 Gas & heating works

- Standards of training in safe gas installation. Approved Code of Practice COP20.
- Design, construction and installation of gas service pipes. Pipelines Safety Regulations 1996. Approved Code of Practice and guidance L81.
- Management of health and safety at work. Management of Health and Safety at Work Regulations 1999. Approved Code of Practice and guidance L21.
- Workplace health, safety and welfare. Workplace (Health, Safety and Welfare) Regulations 1992. Approved Code of Practice L24.
- Safety of pressure systems. Pressure Systems Safety Regulations 2000. Approved Code of Practice L122.
- Safe use of work equipment. Provision and Use of Work Equipment Regulations 1998. Approved Code of Practice and guidance L22.
- Design of plant, equipment and workplaces. Dangerous Substances and Explosive Atmospheres Regulations 2002. Approved Code of Practice and guidance L134.
- Storage of dangerous substances. Dangerous Substances and Explosive Atmospheres Regulations 2002. Approved Code of Practice and guidance L135.
- Control and mitigation measures. Dangerous Substances and Explosive Atmospheres Regulations 2002. Approved Code of Practice and guidance L136.
- Safe maintenance, repair and cleaning procedures. Dangerous Substances and Explosive Atmospheres Regulations 2002. Approved Code of Practice and guidance L137.
- Dangerous Substances and Explosive Atmospheres. Dangerous Substances and Explosive Atmospheres Regulations 2002. Approved Code of Practice and guidance L138.
- IGE/GL/1 - Planning distribution systems
- IGE/GL/2 - Planning of transmission and storage systems
- IGEM/GL/4 - Gas system assets – risk management
- IGE/GL/5 - Managing new works, modifications and repairs
- IGEM/GL/6 - Permitry for the safe flow of gas
- IGE/GL/8 - Reporting and investigating gas incidents
- IGE/GL/9 - Natural gas supply in an emergency

1.7.14 Electrical

- BS EN 61439 2009 - 2012 Low-voltage switchgear and controlgear assemblies.
- BS 5266 Parts 1-10 & BS EN 50172 1999 - 2008 Code of practice for emergency lighting.
- BS 5424 Parts 2 and 3, and IEC 60158 part 3 1985 - 1988 Specification for low voltage control gear.

- BS EN 60422 2008 Monitoring and maintenance guide for mineral insulating oils in electrical equipment.
- BS EN 60079-30-2 2007 Electric surface heating.
- BS 6423 1983 Code of practice for maintenance of electrical switchgear and controlgear for voltages up to and including 1 kV.
- BS 6626 2010 Code of practice for maintenance of electrical switchgear and controlgear for voltages above l kV and up to and including 36 kV.
- BS EN 62305, 4 parts 2006-2011 Code of practice for protection of structures against lightning.
- BS 7375 2010 Code of practice for distribution of electricity on construction and building sites.
- BS 7430 1998 Code of practice for earthing.
- BS 7671 2008 - 2015 Requirements for electrical installations. IEE Wiring Regulations. Seventeenth edition.
- BS 7909 2008 - 2011 Code of practice for temporary electrical systems for entertainment and related purposes.
- BS EN 50110 Parts 1- 2, 2004 - 2010 Operation of electrical installations.
- IEC 60479 Parts 1-4, & PD6519 1994-2005 Guide to effects of current on human beings and livestock.
- BS EN 60529 1992 Specification for degrees of protection provided by enclosures (IP code).
- BS EN 60947 Parts 1-8 2001 - 2011 Specification for low voltage switch gear and control gear.

1.7.15 HVAC

- BS EN 378:2000 Refrigeration systems and heat pumps – safety and environmental requirements.
- BS EN378/2000 and EN378/2007 (Final draft) Refrigeration systems and heat pumps – safety and environmental requirements.

1.7.16 Joinery and carpentry

- BS 8000-5:1990 Workmanship on building sites. Code of practice for carpentry, joinery and general fixings
- BS 1186-2:1988 Timber for and workmanship in joinery. Specification for workmanship, requirements for the fit of parts in various details of joinery.
- BS 1186-3:1990 Timber for and workmanship in joinery. Specification for wood trim and its fixing, requirements for the species, moisture content, classification, quality and workmanship of fixings.
- BS 5756:1997 Visual strength grading of hardwood. Specifies the grading requirements for one grade of structural tropical hardwood and four grades of structural temperate hardwood.
- BS 8000-5:1990 Workmanship on building sites. Code of practice for carpentry, joinery and general fixings, recommendations on basic workmanship.
- BS EN 336:2003 Structural timber - Sizes, permitted deviations
- BS EN 338:2003 Structural timber - Strength classes. Characteristic strength, stiffness properties and density values are given.
- BS EN 350-2:1994 Durability of wood and wood-based products - Natural durability of solid wood. Guide to natural durability and treatability of selected wood species of importance in Europe.
- BS EN 942:1996 Timber in joinery - general classification of timber quality.
- BS EN 1313-1:1997 Round and sawn timber - permitted deviations and preferred sizes. Softwood sawn timber.
- BS EN 1313-2:1999 Round and sawn timber - permitted deviations and preferred sizes. Hardwood sawn timber.
- BS EN 1912:2004 Structural timber - Strength classes - Assignment of visual grades and species, lists the grades of timber from various national standards that satisfy the requirements of European standard strength classes.

1.7.17 Roof works

- BS8454:2006 Code of practice for the delivery of training and education for work at height and rescue
- BS 8437:2005 Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the workplace
- BS 7883:2005 Code of practice for the design, selection, installation, use and maintenance of anchor devices conforming to BS EN 795
- BS EN 13374:2004 Temporary edge protection systems. Product specification, test methods
- BS 5534:2003+A1:2010 Code of practice for slating and tiling (including shingles)
- BS EN 1263-1:2002 Safety nets. Safety requirements, test methods
- BS EN 1263-2:2002 Safety nets. Safety requirements for the positioning limits
- BS 8411:2007 Code of practice for safety nets on construction sites and other works

1.7.18 Bricklaying

- BS 8000-3:2001 Code of practice for masonry & Workmanship on building sites.

1.7.19 Steelworks

- BS 6173:1990 Specification for installation of gas-fired catering appliances for use in all types of catering establishments (1st, 2nd and 3rd family gases)
- BS EN 203-3:2009. Gas heated catering equipmentMaterials and parts in contact with food and other sanitary aspects
- BS EN 203-1:2005+A1:2008. Gas heated catering equipment, General safety rules
- BS EN 161:2011+A3:2013. Automatic shut-off valves for gas burners and gas appliances
- BS EN 60335-2-36:2002+A11:2012. Household and similar electrical appliances. SafetyParticular requirements for commercial electric cooking ranges, ovens, hobs and hob elements
- BS 7671 2008 - 2011 Requirements for electrical installations. IEE Wiring Regulations. Seventeenth edition
- BS EN 61439 2009 - 2012 Low-voltage switchgear and control gear assemblies
- BS 5424 Parts 2 and 3, and IEC 60158 part 3 1985 - 1988 Specification for low voltage control gear
- BS 6423 1983 Code of practice for maintenance of electrical switchgear and controlgear for voltages up to and including 1 kV
- BS 7375 2010 Code of practice for distribution of electricity on construction and building sites
- BS 7430 1998 Code of practice for earthing
- BS 7909 2008 - 2011 Code of practice for temporary electrical systems for entertainment and related purposes
- BS EN 50110 Parts 1- 2, 2004 - 2010 Operation of electrical installations
- BS EN 60947 Parts 1-8 2001 - 2011 Specification for low voltage switch gear and control gear
- BS 8000-13:1989 Workmanship on building sites. Code of practice for above ground drainage and sanitary appliances
- BS 8000-15:1990 Workmanship on building sites. Code of practice for hot and cold water services (domestic scale)
- BS 6465-2:1996 Sanitary installations. Code of practice for space requirements for sanitary appliances

1.7.20 Concrete works

- BS EN 1992-1-1:2004 Eurocode 2: Design of concrete structures General rules and rules for buildings
- BS EN 206:2013 Concrete. Specification, performance, production and conformity
- BS EN 10080:2005 Steel for the reinforcement of concrete, Weldable reinforcing steel, General

1.7.21 Excavation

- Safety at street works and road works: a code of practice 2013

- BS 1710:2014 Specification for identification of pipelines and services
- BS 6187:2011 Code of practice for demolition

1.7.22 Scaffolding

- BS EN 12811-1:2003 Temporary works equipment. Scaffolds. Performance requirements and general design
- SG2:08 SG2 Asbestos Licences and Ancillary work Involving the Scaffolding Contractor
- SG3:08 SG3 Earthing of Scaffolding Structures
- SG4:10 SG4:10 Preventing Falls in Scaffolding
- SG6:10 SG6:10 Manual Handling in the Scaffolding Industry
- SG16:08 SG16 Management of Fall Protection Equipment
- SG17:08 SG17 Fall Arrest Equipment and You
- SG19:10 SG19 A Guide to Formulating a Rescue Plan

1.7.23 Fencing

- BS 1722 Part 1: Specification for Chain Link Fences 2006
- BS 1722 Part 2: Specification for strained wire and wire mesh netting fences 2006
- BS 1722 Part 4: Specification for Cleft Chestnut Pale Fences 1991
- BS 1722 Part 5: Specification for Close Board and Wooden Palisade Fences 2006
- BS 1722 Part 7: Specification for Wooden Post and Rail 2006
- BS 1722 Part 8: Specification for Mild Steel (low carbon steel) Continuous Bar Fences and Hurdles 2006
- BS 1722 Part 10: Specification for Anti-Intruder Fences in Chain Link and Welded Mesh 2006

1.8 Other

Health and Safety: Legal Series L 114 Safe use of woodworking machinery - Provision and use of work equipment regulations 1998 as applied to woodworking machinery.

British Woodworking Federation: Guide 5 COSHH and the joinery manufacturer 1998 revision.

- TG20:13 Good Practice Guidance for Tube and Fitting Scaffolding
- C.I.T.B manual
- The safe use of vehicles on construction sites HSG144
- Avoiding danger from underground services HSG47 (Third edition)
- HSE Guidance note GS6
- Inspections and reports CIS 47 HSE Books 1997
- Traffic signs manual Chapter 8 (Part 1 & 2). Road works and temporary situations – design The Stationery Office 2009
- Guidelines on the positioning of underground utilities apparatus for new development sites (Issue 3) Volume 2 National Joint Utilities Group 2010
- Guidelines on the positioning and colour coding of underground utilities' apparatus (Issue 6) Volume 1 National Joint Utilities Group 2012
- A guide to the Pipelines Safety Regulations 1996. Guidance on Regulations L82 HSE Books 1996
- Specification for the reinstatement of openings in highways: A Code of Practice (Second edition) The Stationery Office 2002
- Trenchless and minimum excavation techniques: Planning and selection (SP147) Construction Industry Research and Information Association (CIRIA)
- Trenchless techniques IGEM/SR/28 Institution of Gas Engineers & Managers
- Health risk management: a guide to working with solvents [HS(G)188]
- Health and safety in construction [HS(G)150]
- Health and safety in arc welding [HS(G)204]
- Manual Handling [HS(G)115]
- The safe use of compressed gases in welding, flame cutting and allied processes [HS(G)139]
- Safety in pressure testing [GS4]
- A competent electrician, who has successfully attended a 17th Edition conversion course, must supervise any electrical work
- Health and safety in roof work HSG33 (Third edition)
- Health and safety in construction HSG150 (Third edition)
- Managing health and safety in construction. Construction (Design and Management) Regulations 2007
- Work with materials containing asbestos. Control of Asbestos Regulations 2012. Approved Code of Practice and guidance L143 HSE Books 2014
- Inspecting fall arrest equipment made from webbing or rope Leaflet INDG367 HSE Books 2002
- Protecting the public: Your next move HSG151 HSE Books 2009
- Safe working on fragile roofs or roofs with fragile elements ACR(CP)002:2012 (Second edition)
- Roofing and cladding in windy conditions NFRC 2006
- A toolbox talk on leaning ladder and stepladder safety Leaflet INDG403 HSE Books 2005
- L114 – Safe use of woodworking machinery: ACOP and guidance (2nd edition)
- British Woodworking Federation: Guide 5 COSHH and the joinery manufacturer 1998 revision
- British Refrigeration Association Guide to Good Commercial Refrigeration Practice.
- Institute of Refrigeration Code of practice for the minimisation of refrigerant emissions from refrigeration systems.
- Institute of Refrigeration safety code for refrigerating systems utilising group A1 and A2 refrigerants.
- City & Guilds 2078 certificates in Handling Refrigerants.
- CITB Safe Handling of Refrigerants certificate.
- The British Refrigeration Association's Specification for Brazing and Brazer Assessment.
- HSE Guidance Note EH55 - The Control of Exposure to Fume from Welding, Brazing and Similar Processes.

- HSE Guidance Note EH54 - Assessment of exposure to fume from welding and allied processes.
- HSE Guidance Note MS15 - Welding.
- HSE Guidance Note PM64 - Electrical Safety in Arc Welding.
- A competent electrician, who has successfully attended a 17th Edition conversion course, must supervise any electrical work.
- BS 41:1973 Specification for cast iron spigot and socket flue or smoke pipes and fittings
- BS 5854:1980 Code of practice for flues and flue structures in buildings
- BS EN 1775:2007 Gas supply. Gas pipework for buildings. Maximum operating pressure less than or equal to 5 bar. Functional recommendations
- BS 5482-1:2005 Code of practice for domestic butane- and propane-gas-burning installations. Installations at permanent dwellings, residential park homes and commercial premises, with installation pipework sizes not exceeding DN 25 for steel and DN 28 for corrugated stainless steel or copper
- BS 5546:2010 Specification for installation and maintenance of gas-fired water - heating appliances of rated input not exceeding 70 kW net
- BS 5864:2004 Installation and maintenance of gas-fired ducted air heaters of rated input not exceeding 70 kW net
- BS 5871 Specification for the installation and maintenance of gas fires, convector heaters, fire/back boilers and decorative fuel effect gas appliances
- BS 6172:2004 Installation and maintenance of domestic gas cooking appliance (2nd and 3rd family gases)
- BS 6173:2009 Specification for installation of gas-fired catering appliances for use in all types of catering establishments (2nd and 3rd family gases)
- BS 6230:2005 Specification for installation of gas-fired forced convection air heaters for commercial and industrial space heating (2nd and 3rd family gases)
- BS 6400:2006 Specification for installation, exchange, relocation and removal of gas meters with a maximum capacity not exceeding 6m3/h
- BS 6891:2005 + A2:2008 Installation of low pressure gas pipework of up to 35 mm (R1 1/4) in domestic premises (2nd family gas)
- BS EN 161:2007 Automatic shut-off valves for gas burners and gas appliances
- AIS Site Guide for Suspended Ceilings
- Guidance Notes on Safe use of Steps and Ladders
- Portable Electrical Tools Code of Practice
- HSG6 Safety in working with lift trucks
- HSG136 Workplace transport safety: Guidance for employers
- HSG246 Safety in the storage and handling of steel and other metal stock
- L117 Rider-operated lift trucks. Operator training. Approved Code of Practice and guidance
- Safety guidelines for steel stock holders and processors (available from: National Association of Steel Stockholders (NASS)
- Safety in the use of pallets Plant and Machinery Guidance Note PM15 (Third edition)
- GGF Code of Practice for PPE in the Glass Industry
- GGF Code of Practice for Safe Window Installation
- Safety in window cleaning using suspended and powered access equipment - HSE Information Sheet MISC611
- Safety in window cleaning using portable ladders - HSE Information Sheet MISC613
- Electrical risks from steam/water pressure cleaners Guidance Note PM29 (Second edition) HSE Books 1995

CN1 “Concrete scabbling“

CIS54 “Dust control on cut off saws used for stone or concrete cutting”

CIS36 - Construction dust

CIS69 - Controlling construction dust with on-tool extraction

Guidance Note MS24 Medical aspects of occupational skin disease

Assessing and managing risks from skin exposure to chemical agents. Guidance for employers and health and safety specialists HSG205 HSE Books 2001

1.9 Working from height

At all times the site operatives must ensure that the correct PPE equipment is worn whilst working on site.

When working at height, site operatives must ensure that the working area is cleared on a period basis to ensure that there is continually a clear and safe working area to prevent slips trips and falls.

1.10 Tools and equipment

All equipment or tools brought on to premises will be of sound construction and will meet the statutory requirements applicable to these tools or equipment. Refer to risk assessment specific control measures for any tools & equipment.

- Hand tools
- Sawing tools
- Cutting tools
- Planing tools
- Shaping tools
- Drilling or boring tools
- Holding and clamping tools
- Step ladders/podium steps/access towers
- Power tools (battery or 110v)
- Stake driving tools
- Shovels
- Excavators
- Mixing tools and plant
- Barrows
- Pumps
- 3 phase 30hp floor saw
- Blade sizes @ 600mm & 800mm
- Hose pipe
- 3 phase leads
- 110v wet vacuum
- 110v leads
- Brokk 100 with hammer and bucket
- sawing tools
- cutting tools
- shaping tools
- drilling or boring tools
- holding and clamping tools
- Digital Volt/Ohm/Amp meter
- Pipe Bender & Cutter
- Welding / Arc tools
- Masonry power saw
- planing tools
- Step ladders/access towers
- Digital thermometer
- Refrigeration gauges
- Vacuum pump
- Recovery machine
- Pipe bender & cutter
- Insulated hand tools
- Digital volt/Ohm/Amp meter
- Insulated rubber mats and gloves
- Jig saw
- Cold cutter
- Cable jacks
- Lifter
- Pipe threading machine
- Welding / arc tools
- Purge hose

- Gas meter
- Smoke detector cover / tester
- Cable crimpers and termination tools
- Step ladders/hop ups/podium steps/access towers
- Mixing equipment or plant
- Concrete nailer
- Concrete driller
- Laser Level machine
- Plumbs
- Steel bench cutters
- Ceiling gun
- Steel square ruler
- Table tile saw (110v)
- Mechanical tile cutter
- Trowel
- Paint spraying machine
- Suction devices
- Cutting knifes
- Trolleys
- Body pads to assist with manual handling
- Silicone gun
- Warning signs or temporary manifestation
- Cleaning products
- Paving machine
- Buckets
- Cloths
- Window cleaning tools
- Pressure washers
- Vacuum cleaners

Insulated hand tools:

Use of any mechanical handling equipment should be by trained personnel who must be instructed in the use of ancillary lifting equipment ie wire rope slings and chains etc, and be shown how to attach them to the various types of loads.

1.11 Special permits

Any cutting of MDF may require a permit to work from site management, ensuring all cutting undertaken in a well ventilated area.

1.12 General waste handling

A suitable route to transport waste must be considered prior to the work.

Internal routes should be protected to prevent damage to the fabric and decoration of the building. Particular attention should be made to door frames and sharp changes of route direction.

If external routes cross pedestrian footpaths an alternative route should be provided for the public. The waste route should be segregated using barrier fencing with suitable signage to direct the public to the alternative pathway and prevent unauthorised persons accessing the waste route.

Ensure the correct PPE is worn when handling waste.

Always use a mechanical means of moving waste whenever possible (e.g. wheel barrow). Use good manual handling techniques when mechanical assistance is not practical or safe.

Always dispose of waste in accordance with principle contractor's environmental policy and waste management plan.

Report any environmental waste accidents or spillages immediately to the principle contractor who will put into action the emergency waste containment plan and inform the relevant authorities. A spill kit will be carried on site all times.

1.13 Use of skips

Waste is to be deposited into a skip.

Barrier fencing should be positioned around the skip with 'keep out' signage attached.

Skips will be covered and secured to reduce the risk of arson and theft.

Skips should be positioned a minimum of 6m away from buildings or other objects to reduce the spread of fire and to satisfy the requirements of insurance.

Skips should be positioned to allow easy access for the skip vehicles to drop off new skips and collect full skips.

Always use a banksman when skip vehicles are reversing.

Skips are to be emptied regularly to reduce the risk of arson and theft.

No hazardous material is to be deposited into skips.

Temporary ramps used to gain access to skips should be sufficiently wide to prevent falls. On large or high skips, ramps should include side fall protection.

Never climb into a skip.

1.14 Hazardous waste

Hazardous waste such as asbestos must be collected by an approved licensed contractor.

Hazardous waste should not be put with non-hazardous waste or sent for landfill.

Sharps waste should be placed in a yellow sharps container and the lid firmly closed during transit. Sharps should never be carried in the front of vehicles.

1.15 Hazardous Substances

Irritant

Highly Flammable

Oxidising

Corrosive

Dangerous For The Environment

Gas Under Pressure

1.16 Emergency procedures

The client or principal contractor will ensure that the existing site emergency procedures are followed and that relevant information is given to operatives at time of induction or when changes are made to procedures.

The principal contractor is responsible for ensuring that all operatives under their control adhere to the site emergency procedures at all times.

1.17 Welfare requirements

Welfare arrangements are supplied by the client or principal contractor.

These should be in line with Schedule 2 of the Construction Design & Management Regulations 2015 (CDM). All sites are to have a minimum amount of welfare facilities available for workers, which include the following:

- Toilets
- Washing facilities
- Drinking water
- Changing rooms and lockers
- Heating
- Rest facilities

1.18 PPE Requirements


Hard Hats


Safety Boots


Hi Vis Vest


Safety Gloves


Hearing Protection


Dust Mask


Face Shield


Safety Glasses


Safety Goggles


Welding Mask


Protective Clothing


Fall Restraint

1.19 Manual handling

The Manual Handling Operations Regulations (MHOR) 1992 establish a clear hierarchy of measures for dealing with risks from manual handling, these are:

- Avoid hazardous manual handling operations so far as is reasonably practicable.

- Assess any hazardous manual handling operations that cannot be avoided.

- Reduce the risk of injury so far as is reasonably practicable.

- The workforce will be trained to, observe safe lifting techniques, and safely handle loads.

- No one will be expected to lift on their own, materials weighing more than 25kg.

- Safe manual handling procedures should be followed at all times.

There are some basic principles that everyone should observe prior to carrying out a manual handling operation:

- Ensure that the object is light enough to lift, is stable and unlikely to shift or move.

- Heavy or awkward loads should be moved using a handling aid.

- Make sure the route is clear of obstructions.

- Make sure there is somewhere to put the load down wherever it is to be moved to.

- Stand as close to the load as possible, and spread your feet to shoulder width.

- Bend your knees and try and keep the back's natural, upright posture.

- Grasp the load firmly as close to the body as you can.

- Use the legs to lift the load in a smooth motion as this offers more leverage reducing the strain on your back.

- Carry the load close to the body with the elbows tucked into the body.

- Avoid twisting the body as much as possible by turning your feet to position yourself with the load.

When ever manual handling is to be undertaken, especially if it is an uncommon or high risk task, an assessment of four specific activities – Task, Individual, Load and Environment (easily remembered by the acronym TILE) needs to be implemented:

T - The Task

Does the activity involve twisting, stooping, bending, excessive travel, pushing, pulling or precise positioning of the load, sudden movement, inadequate rest or recovery periods, team handling or seated work?

I - The Individual

Does the individual require unusual strength or height for the activity, are they pregnant, disabled or

suffering from a health problem. Is specialist knowledge or training required?

L - The Load

Is the load heavy, unwieldy, difficult to grasp, sharp, hot, cold, difficult to grip, are the contents likely to move or shift?

E- The Environment

Are there space constraints, uneven, slippery or unstable floors, variations in floor levels, extremely hot, cold or humid conditions, poor lighting, poor ventilation, gusty winds, clothing or Personal Protective Equipment that restricts movement?

All work will be undertaken by qualified competent persons with experience of the type of work described above, and in all cases in full accordance with safety procedures specified in the company's health and safety Policy.

The work activities described within this method statement and all associated safety measures are not to be deviated from in any way. If, for any reason, the method statement cannot be implemented in full or should the described process be found inadequate for the purpose of providing a safe working environment, the affected activities must cease until such time as the method statement has been amended and re-approved as appropriate with any changes communicated by a toolbox talk to all employees involved before work recommences.

DCS Universal Carpentery & Joinery Ltd
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Hertfordshire
WD23 3NF

Telephone: 02036738809

2.0 Risk assessment

Document created: 06 Mar 16
Document updated: 06 Mar 16
Prepared by: Cristina Voicu

McCrone Mews

Site address:
Belsize Lane
London
City of London
NW3 5BG

Project reference: McCrone Mews
Principal designer: Dean Willars
Principal contractor: DCS Universal Carpentry & Joinery
Location of works: McCrone Mews
Start date and end date: 04/04/2016 to 04/11/2016
Site supervisor: Sorin Voicu
Site supervisor phone: 07951227844

Risk matrix

Likelihood 4
x
Severity 5
=
Risk/residual risk 20

			Likelihood				
			Very unlikely	Unlikely	Possible	Likely	Very likely
			1	2	3	4	5
Severity	Negligible	1	1	2	3	4	5
	Minor	2	2	4	6	8	10
	Moderate	3	3	6	9	12	15
	Major	4	4	8	12	16	20
	Extreme	5	5	10	15	20	25

2.1 Exposure to sewage rats and vermin

2.1.1 Task: Exposure to sewage rats & vermin

Hazard	Risk	Control measures	RR
Leptospirosis (Weils Disease), hepatitis or other infections possibly causing death	4 x 5 = 20	Ensure cuts and abrasions are cleaned immediately It's good practice to wash your hands, before smoking, eating & drinking. To reduce the risk of ingestion of substances hazardous to health Arrangements to be taken to any medical centre, first aid post or direct to hospital for medical attention where necessary Wear impervious gloves where physical contact with suspect surfaces is necessary Management to periodically check and report on compliance with environment assessment of risk	1 x 5 = 5
Persons at risk: User			

2.2 Working around live electrical equipment

2.2.1 Task: Working close to or adjacent to electrical services

Hazard	Risk	Control measures	RR
Contact with live electrical equipment whilst undertaking work, causing serious or fatal injuries due to, incomplete installation, poor building maintenance or unfit safe system of work being employed	4 x 5 = 20	Ensure a safe system of work has been implemented with site supervisor including a permit to work if necessary Follow electrical isolations risk assessment where necessary before operatives or site occupants undertake their respective work Competent electrician to identify with site supervisor any live electrics and fit warning notices if live electrics cannot be made dead during works Site supervisor to control access of site operatives into areas of risk, employing a permit to work system where any risk of contact with live electricity is present Ensure all workers are aware of any live electrics through inductions and regular tool box talks Prevent direct contact by ensuring all insulation barriers/covers are fitted to any electrical boards, equipment etc. by a competent electrician No works to be carried out directly on live equipment	1 x 5 = 5

Persons at risk: All site operatives

2.2.1 Task: Working in areas near live electrical equipment

Hazard	Risk	Control measures	RR
Serious or fatal burns and injuries from electric shock	4 x 5 = 20	All operatives to be informed of any live electrical services and how to avoid injury during site induction Protect exposed services prior to commencing work Competent electrician to isolate as many live electrical circuits to area of concern as possible before commencing work Warning signs to be placed on all live equipment No works to be carried out directly on live equipment	1 x 5 = 5

Persons at risk: All site operatives

2.3 Preventing exposure to asbestos fibres

2.3.1 Task: Working in areas where asbestos could be present

Hazard	Risk	Control measures	RR
Fatal disease (asbestosis) caused by inhaling asbestos fibres	5 x 5 = 25	All control measures listed in the the Control of Asbestos Regulations 2012 act will be adhered too Asbestos register to be checked for content/location All operatives to undergo asbestos awareness training Inspections on site should be carried out before commencing work, if asbestos is identified, or suspected, work should be suspended and site supervisor made aware If asbestos found and controlled, the client or principal contractor shall provide information on the location and condition of the materials to all site operative's Only a licensed approved contractor can undertake removal of asbestos	1 x 5 = 5

Persons at risk: All site operatives

2.4 Working in areas of high volume of movement

2.4.1 Task: Working in areas of high volume of movement

Hazard	Risk	Control measures	RR
Collisions or falls from high traffic areas	3 x 3 = 9	Work areas to be visibly cordoned off and alternative routes marked	1 x 3 = 3

Persons at risk: All site operatives

2.5 Working out of hours

2.5.1 Task: Working out of hours

Hazard	Risk	Control measures	RR
General injuries sustained whilst undertaking work out of hours and not receiving prompt help or response	4 x 3 = 12	Local procedures for out of hours working should be produced and communicated with all operative's, including signing in books, inductions, out of hours emergency procedures Client or principal contractor will deem which activities can or can't be undertaken out of hours and the site supervisor will relay this to staff before undertaking any works. Authorisation for working out of hours to be given by the client or principal contractor Only those with correct competencies will be able to undertake work i.e. young workers will need supervision Working alone out of hours will typically be avoided, if required a lone working risk assessment will be undertaken Atleast one operative to be supplied with a mobile phone in case of emergencies	1 x 3 = 3

Persons at risk: All site operatives

2.6 Lone working

2.6.1 Task: Working alone

Hazard	Risk	Control measures	RR
Serious or fatal injuries from lack of visual or audible communication with someone who can summon assistance in the case of an accident	4 x 4 = 16	Ensure that any medical conditions which might be relevant to your working alone are fully discussed with your line manager and, if necessary, Occupational Health and your own GP. Do not work alone if any such condition is assessed as putting you at increased risk Local procedures for lone working should be produced and communicated with all operative's, supervision requirements, permits and lone working emergency procedures Client or principal contractor will deem which activities can or can't be undertaken whilst lone working and the site supervisor will relay this to staff before undertaking any works Authorisation for lone working to be given by the client or principal contractor Only those with correct competencies will be able to undertake work i.e. young workers will need supervision Ensure that PAT tested items have been labelled "Pass" and that all electrical cables etc. are regularly visually inspected for damage. Do not interfere with plugs, cables etc, when any item is connected to the power supply High risk activities like working on live electrical equipment and working in confined spaces will either be eliminated or minimised where possible Operative to be supplied with a mobile phone in case of emergencies Where possible periodic telephone contact or visits to lone workers will be undertaken by supervisor	1 x 4 = 4
Persons at risk: User			

2.7 Working within risers

2.7.1 Task: Working within risers

Hazard	Risk	Control measures	RR
Contact with live electricity causing serious or fatal injuries	5 x 5 = 25	Ensure a safe system of work has been implemented with site supervisor including a permit to work if necessary Where possible, always ensure any live electricity is isolated according to the electrical isolations risk assessment and by a competent electrician Place warning notices and secure areas where isolations are to be undertaken, ensuring all site staff are aware of non-tampering policy Site supervisor to control access of site operatives into risers where live electricity present, employing a permit to work system Prevent direct contact to live electricity by ensuring all insulation barriers/covers are fitted to any electrical boards, equipment etc. by a competent electrician	1 x 5 = 5
Persons at risk: All site operatives			
Serious or fatal injuries caused by falling men or materials	5 x 5 = 25	Ensure a safe system of work has been implemented with site supervisor including a permit to work if necessary Ensure secure flooring and footing provided, and site management has confirmed access to riser area is safe to work in Any holes to floor structure to be refitted by competent person protected and cordoned off with warning signs posted As a last resort safety harness to be worn where holes or drops are exposed with a permit to work system to be employed Head protection to be worn at all times	1 x 5 = 5
Persons at risk: All site operatives			

2.8 Arrival & departure from site

2.8.1 Task: Unloading equipment

Hazard	Risk	Control measures	RR
Electrical shock or fatal injuries sustained from contact with overhead cables	4 x 5 = 20	Check prevailing site condition and ensure all deliveries undertaken in pre-determined safe area No vehicles to be parked or unloaded in the vicinity of overhead lines If necessary for deliveries to be undertaken below overhead cables, ensure works and area coordinated with either local authority or principal contractor with sufficient protection in place for workers and public, together with ensuring safe working distances are achieved and goal posts are used where required	1 x 5 = 5
Persons at risk: User			
Crushed by falling load with potentially fatal injuries	5 x 5 = 25	Deliveries to be taken in designated areas only, other workers & public to be kept outside of delivery area Any machinery used for unloading to be operated by trained personnel only and carry a current inspection certificate Any items that could potentially be lifted by the wind should be placed in designated anchor areas and or weighted down Ensure any equipment used for unloading is not operated in overly windy conditions - refer to equipment or plant guidelines Goods should be placed on firm level ground in designated areas, height of goods should be kept to a minimum to prevent stack failure	1 x 5 = 5
Persons at risk: All site operatives & public			
Muscle strains, sprains & injuries caused by lifting heavy loads	3 x 3 = 9	Use correct lifting techniques, all operatives should be trained in the safe method of lifting - refer to manual handling section in attached method statement Ensure two man lift is enforced for reaching or carrying heavier items Split loads to make them lighter and safer to handle Although no universal safe maximum, mechanical aids to be used when loads exceed 25kg per person or as referenced in method statement Be aware of handling large or bulky items e.g. plasterboard in windy conditions	1 x 3 = 3

Persons at risk: User

2.8.1 **Task:** Leaving vehicle

Hazard	Risk	Control measures	RR
Struck by moving vehicles	4 x 4 = 16	All operatives to park in designated areas Follow site rules and authorised routes provided by client or principal contractor All operatives to wear hi-visibility jackets when leaving vehicle All operatives to enter and sign in onsite All operatives to receive induction Banksman to be used when vehicles are reversing	1 x 4 = 4

Persons at risk: All site operatives

2.8.1 **Task:** Leaving or entering site

Hazard	Risk	Control measures	RR
Struck by moving vehicles	5 x 4 = 20	All operatives and site visitors must ensure they sign in when entering Site inductions to be provided to all operative's and visitors before entering the work site Ensure correct PPE is worn at all times All operative's and visitors to keep to pedestrian areas only The use of cross over points will be incorporated into site plan by principal contractor All operative's should be made aware of changes in Site Traffic Management Plan as or when changed All operative's and site visitors must ensure they sign out when exiting Watch for other contractors leaving the area at the same time	1 x 4 = 4

Persons at risk: All site operatives & public

2.9 Preventing slips, trips and falls

2.9.1 Task: Movement at height or on raised platforms

Hazard	Risk	Control measures	RR
Severe or fatal injuries from slip, trips and falls at height	4 x 5 = 20	Ensure good housekeeping onsite, 'clean as you go' implemented by all site operatives across the site All items on raised platforms to be placed in designated and safe area away from thoroughfare and edges of platforms Ensure raised platforms are protected by cappings or fenced off to prevent entry into any risk area Ensure correct PPE is worn at heights to prevent falling from height resulting from slips, trips or falls	1 x 5 = 5

Persons at risk: All site operatives

2.9.1 Task: Movement at ground level

Hazard	Risk	Control measures	RR
Severe strains, sprains and muscle breaks	4 x 3 = 12	All operatives to be shown the correct area for safe storage of materials onsite before works begin Ensure clear working area on site, ensure dustsheets, mats and other materials cannot slip or slide underfoot Manage and remove potential slip trip hazards as they arise and notify site management if assistance required Do not carry items that will hinder the carrier's clear sight of view All rubbish to removed from site at scheduled times, organised by site supervisor and in line with the site waste management plan	1 x 3 = 3

Persons at risk: All site operatives

2.10 Young people at work

2.10.1 Task: Young people at work

Hazard	Risk	Control measures	RR
Potential injuries or fatalities sustained from young person having lack of experience, being unaware of existing or potential risks and/or lack of maturity	3 x 5 = 15	The site foreman or individual responsible for the health and safety onsite will need to induct young person, separately if needed On top of normal induction, specific reference shall be made to the layout of the workplace, the physical, biological and chemical agents they will be exposed to, manual handling procedures and how the work and processes are organised Site foreman or individual responsible for health and safety should ensure young person has an understanding of the hazards, risks and controls included in this risk assessment and method statement A young person should have tailored training before undertaking their work where necessary and closer supervision whilst undertaking their work A young person should be introduced to the worksite and any workers that may come into contact with young person A young person should have their progress continually reviewed to help identify if and where adjustments can be made to make their work safer A young person should not work from height unless under supervision and risks have been assessed under the working from height risk assessment A young people should not operate any equipment or machinery unless supervised or specifically trained to undertake such work High risk plant or equipment should have an age limit applied where serious risk to young person is evident	1 x 5 = 5

Persons at risk: User

2.11 Working in confined spaces

2.11.1 Task: Working in confined spaces

Hazard	Risk	Control measures	RR
Serious injury or fatality sustained from working in confined spaces due to lack of oxygen, poisonous gas, fumes, vapour, dust or inherently hot conditions	4 x 5 = 20	Under the Confined Spaces Regulations 1997, the site supervisor should always try to avoid entry to confined spaces, e.g. by doing the work from outside If entry to a confined space is unavoidable, a safe system of work should be followed as per method statement, and site supervisor should implement confined works permit before starting work The permit to work will include training/instructions and monitoring/auditing throughout works as well as specific emergency procedures All site operatives involved will need to be properly trained and instructed and operation to be manned by two operatives at all times with a clear communication system also implemented All mechanical & electrical equipment to be isolated before works begin Ensure all internal spaces are clean before entry, removing any residue Ensure size of entrance to confined space allows workers wearing all the necessary equipment to climb in and out easily, and provide ready access and egress in an emergency A provision of additional ventilation should be implemented if possible, mechanical ventilation may be necessary to ensure an adequate supply of fresh air It may be necessary to check the confined space is free from both toxic and flammable vapours and that it is fit to breathe; any testing should be carried out by a competent person The use of non-sparking tools, specially protected lighting and extra low voltage equipment (typically less than 25 V) and, where necessary, residual current devices may be required The provision of breathing apparatus and rescue harnesses may be required Emergency procedures to be implemented as per method statement failure	1 x 5 = 5

Persons at risk: User

2.12 Working with or around combustible materials

2.12.1 **Task:** Working with or around combustible materials

Hazard	Risk	Control measures	RR
Materials used may form a fuel in the event of ignition, causing fires resulting in burns, smoke inhalation or possible death	3 x 5 = 15	Naked flames and smoking are strictly forbidden near combustible materials Appropriate signage is erected or displayed identifying combustible materials on transport and storage areas Appropriate means of raising fire alarm to be allowed for Suitable fire fighting equipment is provided to tackle fires A nominated fire co-ordinator and operative trained in the use of fire extinguishers Fire detection systems and hot works permits are in place Fire escape routes are clearly displayed on site and all operatives are aware of their assembly point Correct storage procedures are followed and according to manufacturers instructions Spill kits are available to soak up any spillages Materials are only used for their intended purpose	1 x 5 = 5

Persons at risk: All site operatives

2.13 Working in noisy environments

2.13.1 Task: Working in a noisy environment or operating noisy plant

Hazard	Risk	Control measures	RR
Gradual or sudden noise exposure causing permanent hearing damage	4 x 4 = 16	All operatives will be provided with information, instruction and training around working in noisy environments or operating noisy plant Alternative processes, equipment and/or working methods which would make the work quieter will be investigated before undertaking any works Correct ear protection such as ear plugs or defenders will be used in conjunction with any noisy plant or when operating in near noisy areas A suitable protection factor – sufficient to eliminate risks from noise but not so much protection that wearers become isolated will be selected for the task Screens, barriers, enclosures and absorbent materials should be considered to reduce the noise further Workplace shall be designed in such a way to create quiet workstations Operatives shall be in noisy areas for limited time only Exposure to noisy works won't exceed 87 decibels for daily or weekly personal noise exposure; and 140 decibels for peak sound pressure Health surveillance will be provided to monitor noise exposure over the upper exposure action values	1 x 4 = 4
Persons at risk: All site operatives			
Risk of injury or death from interference with communications reducing people's awareness of their surroundings	3 x 5 = 15	Where warning sounds are used to avoid or alert to dangerous situations, principal contractor shall make sounds clearly audible for noisy environment Any systems of work where safety relies on verbal communications should be avoided where levels of noise or wearing hearing protection could lead to misunderstandings When working around mobile machinery or traffic, operative to be extra careful of surroundings and not select hearing protection devices that are totally isolating in nature	1 x 5 = 5
Persons at risk: User			

2.14 Working in dusty environments

2.14.1 Task: Working around or causing construction dust

Hazard	Risk	Control measures	RR
Lung cancer, silicosis, Chronic Obstructive Pulmonary Disorder or asthma caused through inhaling construction dust	4 x 5 = 20	When operating plant that causes dust, operative will refer to specific risk assessment for this plant Consider using a different method of work altogether when operating tools that create dust Always use the right size building materials so less cutting or preparation is needed Where possible, use a less powerful tool that creates less dust Any area for cutting from workbenches etc. will be in an isolated area selected by site supervisors When alternatives cannot be used and dust control not sufficient , water will be used for entire length of task or/and vacuum extraction will be used FFP3 dust mask thats face fit tested, tight goggles or face mask will be worn at all times Always maintain a high level of housekeeping, using filter vacuums for debris, bagging and removing waste according to local regulations and sit management plan	1 x 5 = 5

Persons at risk: All site operatives

2.15 Working with or around mould spores

2.15.1 Task: Removal or working around mould spores

Hazard	Risk	Control measures	RR
Mould may cause asthmatic reactions and may also produce toxins with suspected effects on respiratory health	4 x 4 = 16	Mould to only be disturbed by trained operatives and full COSHH assessment undertaken before works begin Operatives to wear disposable overalls, nitrate gloves, BS EN 166 eye protection and an EN 149:FFP2 respirator when directly exposed to mould/bacteria Mould species to be identified by trained operative before disturbing Prevent air-borne concentrations higher than the occupational exposure limits, where reasonably practicable the use of local exhaust ventilation and good general ventilation practices should be employed Humidity of areas should be kept below 75%, with heaters used to dry any remaining growth areas Once the spores have dried, a vacuum cleaner with a HEPA filter will be used to remove any surface growth Dampen the surface with 1:4 diluted bleach containing small amounts of washing up liquid or fungicidal wash Area will be cleaned thoroughly with a cloth and a fungicidal wash, then leave it to dry Paint affected surfaces with anti-fungal paint to discourage mould growth Good hygiene measures to be maintained; including no smoking, drinking or eating whilst handling Immediately after working with mould, operatives should wash or shower to avoid contamination, dispose of overalls and clean any other contaminated clothing before re-using them	1 x 4 = 4

Persons at risk: All site operatives

2.16 Contact with electricity from overhead power sources

2.16.1 **Task:** Working near or where materials/plant could strike overhead power sources

Hazard	Risk	Control measures	RR
Electrocution and associated injuries from secondary hazards, i.e. falls from height and falling materials	5 x 5 = 25	If overhead lines are near or obstructing planned works, all overhead lines will be assumed to be live and carrying electricity until such a time as it is specifically proven to the contrary - works may not commence until this is the case When overhead lines are proven to be carrying electricity, works must take place in accordance with local permit arrangements	1 x 1 = 1

Persons at risk: All site operatives

2.17 Delivery of materials

2.17.1 Task: Unloading of materials

Hazard	Risk	Control measures	RR
Falls from height or back strain / injury during unloading	5 x 4 = 20	Delivery driver to avoid manual handling beyond their capability, which they believe may cause injury Delivery driver to ensure mechanical lifting aids (Teleporter, pallet truck etc) to be used to off load materials wherever possible Delivery driver to ensure correct loading of delivery vehicles prior to vehicles leaving materials yard and to ensure security of load for transportation Materials to be palleted and wrapped wherever possible Delivery driver to ensure delivery vehicles are loaded in correct order for deliveries so as to eliminate the need for re-stacking of materials after first delivery has been made	1 x 4 = 4
Persons at risk: User			
Injuries from falling loads or mechanical failure of tail lift whilst unloading	5 x 4 = 20	Delivery Driver to take care when opening doors or curtains as to the security of the load Delivery vehicle door or curtains only to be opened from the ground and no entry to be made to the vehicle whilst the doors or curtains are open Tail lift only to be operated under manufacturer's recommended weight limits Tail lift to be inspected as per manufactures recommendations If manual unloading is to be carried out items are to be positioned to the area required with the curtain / doors closed Tail lift may be used as an interim platform for loading / unloading	1 x 4 = 4
Persons at risk: User			

2.18 Visually impaired people at work

2.18.1 Task: Working with Visually impaired people onsite

Hazard	Risk	Control measures	RR
Potential injuries or fatalities sustained from visually impaired operatives being unaware of existing or potential risks	1 x 1 = 1	The site foreman or individual responsible for the health and safety onsite will need to induct visually impaired operatives, separately if needed, on top of normal induction. Specific reference shall be made to the layout of the workplace, the physical, biological and chemical agents they will be exposed to, manual handling procedures and how the work and processes are organised. Site foreman or individual responsible for health and safety should ensure visually impaired operatives has an understanding of the hazards, risks and controls included in this risk assessment and method statement. They should be made aware of the location of hazards and their location on site. A visually impaired operative should have tailored training before undertaking their work where necessary and closer supervision whilst undertaking their work and signing off completed works. Visually impaired operatives should be introduced to the worksite and any workers that may come into contact with them, Visually impaired operatives should have their progress continually reviewed to help identify if and where adjustments can be made to make their work safer. A visually impaired operative should not work from height unless under supervision and risks have been assessed under the working from height risk assessment. Visually impaired operatives should not operate any equipment or machinery unless supervised and it has been deemed safe to do so. If the site foreman has any doubts about a visually impaired operative's ability to carry out a task safely, they will be asked to cease performing the task until concerns are addressed or another operative can complete the task in their place.	1 x 1 = 1

Persons at risk: All site operatives

2.19 Using portable power tools

2.19.1 Task: Using portable power tools

Hazard	Risk	Control measures	RR
Electrocution causing serious or fatal injuries whilst using portable power tools	3 x 5 = 15	Only 110v or battery operated equipment to be used Electric equipment to be kept dry and stored in toolbox to protect from damp and damage Visual inspection prior to use, plugs, leads, power supply (transformer), insulation, switches, RCD(if used), signs of burns, casing, loose parts Damaged or defective equipment including leads to be replaced immediately or fixed by competent person Electrical equipment must not to be tampered with, anything showing evidence of tampering must not be used until tested by a professional Electrical equipment to be PAT tested	1 x 5 = 5
Persons at risk: User			
Hearing loss to site operatives working near noisy power tools	3 x 2 = 6	All operatives trained in risks of noise exposure Suitable hearing protectors should be provided for operatives and any surrounding workers Use low-noise tooling where possible Other trades using grinders or other high noise emitting tools should not be working close enough to other site operatives to cause problems	1 x 2 = 2
Persons at risk: All site operatives			
Serious cuts, injuries or amputations to body parts from the incorrect use of cutting tools	3 x 5 = 15	All operatives to be trained in the safe usage of power tools Always choose the right tool for the job Ensure all portable tools are set up correctly and securely fastened to worktops as per product specifications Ensure any portable tools that are set up, are in a designated safe area avoiding thoroughfare of other workers or vehicles All cutting tools to have safety guards incorporated, fastened securely and regularly checked and maintained Ensure no loose clothing is worn in the vicinity of cutting, and gloves are worn at all time	1 x 5 = 5
Persons at risk: User			

2.20 Using vibrating machinery

2.20.1 Task: Using vibrating machinery

Hazard	Risk	Control measures	RR
Serious injuries like hand-arm vibration syndrome caused by the extended use of vibrating machinery	5 x 4 = 20	Where possible, try eliminate or reduce exposure to the lowest reasonably practicable level Consult supervisor and employees for extent of use with vibrating machinery All workers should have sufficient training and competency in using vibrating machinery A list of all vibrating equipment that could pose a risk should be collated in the 'tools and equipment' section of the method statement with info on each item including make, model, power, vibration risks, vibration information etc. A list of all employees using equipment should be made and what jobs they will be undertaking with the vibration equipment in the 'description' section of the method statement Make an assessment of how long employees hands are in contact with equipment while its vibrating, ask employees which equipment seems to have high vibration and note other sources of difficulty using equipment in the 'manual handling' section of the method statement Any vibrating activities should be grouped according to whether they are high, medium or low risk High risk (above ELV) activities could include using hammer action tools for more than about one hour per day or some rotary and other action tools for more than about four hours per day Medium risk (above the EAV) activities could include hammer action tools for more than about 15 minutes per day or some rotary and other action tools for more than about one hour per day Ensure employees are not exposed above the ELV If they are, take immediate action to prevent recurrence Where exposure still remains above EAV implement health surveillance and make available job rotation to limit excessive exposure	1 x 4 = 4

Persons at risk: User

2.21 Using disc cutters

2.21.1 Task: Operating petrol disc cutters or cut off saws

Hazard	Risk	Control measures	RR
Inhalation of respirable crystalline silica (RCS) causing silicosis, chronic obstructive pulmonary disease (COPD) or lung cancer	5 x 5 = 25	Operate machinery in a well ventilated and cordoned off area Attach water hose to cut-off saw and use as suppression during cutting A dust mask with respirator with an assigned protection factor of 20 must be worn at all times	1 x 5 = 5
Persons at risk: User			
Serious injuries sustained from using faulty equipment	4 x 4 = 16	Only a trained operative may use a cut-off saw or disc cutter Ensure machinery is inspected regular and tracked in a log Ensure cutting disks are replaced when worn by a trained operative	1 x 4 = 4
Persons at risk: User			
Serious injuries sustained to eyes or body from contact with flying objects or cutting wheels	4 x 3 = 12	Only operatives with training and authorised to use cut of saws should undertake work Guard on cutting wheel to be correctly adjusted to suit work position	1 x 3 = 3
Persons at risk: User			
Hearing damage sustained from the use of cut off saws or disk cutters	5 x 3 = 15	Designated area for cutting to be used where possible When cutting in situ, area to be cleared of personnel or provided with hearing protection Hearing protection to be worn by user at all times	1 x 3 = 3
Persons at risk: User			

Injuries sustained from equipment vibration	4 x 3 = 12	Use in compliance with Control of Vibration at Work Regulations 2005 Gloves to be worn at all times by operatives Working in short stints with breaks in-between to be applied See vibration risk assessment if sustained use of vibration equipment necessary	1 x 3 = 3
Persons at risk: User			
Entanglement of clothing or hair whilst using abrasive wheel	3 x 4 = 12	User not to wear loose clothing or jewellery If operative has long hair, ensure hair is tied back	1 x 4 = 4
Persons at risk: User			

2.21.1 **Task:** Fuelling cut off saw or disc cutters (petrol two stroke oil)

Hazard	Risk	Control measures	RR
Serious injuries sustained from fire or explosion	4 x 4 = 16	No smoking onsite unless in designated areas Ensure fuelling site is shaded and away from any possible ignition source Keep fuel in correct sealed containers When refuelling, ensure saw fuel cap is replaced securely	1 x 4 = 4
Persons at risk: User			

2.22 Using abrasive wheels

2.22.1 Task: Use of abrasive wheels

Hazard	Risk	Control measures	RR
Serious injuries sustained to eyes or body from contact with flying objects or cutting wheels	5 x 3 = 15	Only operatives with training and authorised to use abrasive wheel tools should undertake work Correct PPE to be worn at all times when using abrasive wheels and or angle grinders, including safety goggles and gloves Guard on abrasive wheel to be correctly adjusted to suit work position	1 x 3 = 3
Persons at risk: User			
Damage to lungs through the inhalation of dust	4 x 3 = 12	Where possible, dust extraction to be used or abrasive wheel work to be undertaken in a well ventilated area All operatives in the area to where correct PPE, masks may be required depending on the application Refer to HSE Construction Information Sheets 36, 54 for further dust control information if necessary	1 x 3 = 3
Persons at risk: User			
Injuries sustained from the use of noisy equipment	5 x 3 = 15	Designated area for abrasive wheel cutting/grinding to be used where possible When cutting in situ, area to be cleared of personnel or provided with hearing protection Hearing protection to be worn by operative at all times	1 x 3 = 3
Persons at risk: All site operatives			
Injuries sustained from equipment vibration	4 x 3 = 12	Use in compliance with Control of Vibration at Work Regulations 2005 Gloves to be worn at all times by operatives Working in short stints with breaks in-between to be applied See vibration risk assessment if sustained use of vibration equipment necessary	1 x 3 = 3
Persons at risk: User			

Possible fire from sparks emanating from abrasive cutting tools	4 x 3 = 12	A hot works permit shall be applied for as necessary, details of safe work to be provided by principal contractor Site management will ensure operation of abrasive wheels will be isolated from flammable materials. If unavoidable, ensure flammable materials are covered with flame retardant cover Suitable fire extinguisher for type of flammable materials to be supplied Ensure any petrol operated machines do not leak Switch off petrol operated machines before refuelling	1 x 3 = 3
Persons at risk: All site operatives			
Entanglement of clothing or hair whilst using abrasive wheel	5 x 3 = 15	User not to wear loose clothing or jewellery If operative has long hair, ensure hair is tied back	1 x 3 = 3
Persons at risk: User			

2.22.1 **Task:** Replacing abrasive wheels

Hazard	Risk	Control measures	RR
Possible injuries sustained from replacing wheels	4 x 2 = 8	Only operative's trained in the safe use of abrasive wheels are to change or operate abrasive wheels	1 x 2 = 2
Persons at risk: User			

2.23 Using vehicles onsite

2.23.1 Task: Operating or manoeuvring vehicles

Hazard	Risk	Control measures	RR
Strikes to a pedestrians or site operatives, in particular when reversing causing fatal or serious injuries	5 x 5 = 25	The principal contractor must ensure that pedestrians and vehicles are adequately separated by establishing pedestrian-only areas from which vehicles are completely excluded; safe designated pedestrian routes to work locations, vehicle-only areas, and safe vehicle routes around the site needs to be implemented across site Avoid reversing as far as possible, implement one-way systems around site and in loading and unloading areas, provide designated turning areas to eliminate the need for reversing Design vehicle reversing areas which, allow adequate space for vehicles to manoeuvre safely, and are clearly signed to have physical stops or buffers to warn drivers that they have reached the limit of the safe reversing area Fit CCTV, convex mirrors, Fresnel lens etc to overcome restrictions to visibility from the driver's seat, particularly at the sides and rear of vehicles Fit radar proximity devices to vehicles to indicate to drivers when there are objects near the vehicle Ensure everyone on site understands site rules on vehicle safety Drivers and signallers need to be in constant communication during reversing operations Signallers should not be put at risk from vehicle movements, eg by standing directly behind reversing vehicles Ensure all vehicles on site are fitted with appropriate warning devices Ensure reversing warning lights and alarms are in good working order and instruct workers to keep clear of moving vehicles All workers to wear high visibility vests at all times	1 x 5 = 5

Persons at risk: All site operatives & public

Striking services and obstructions causing serious inury site operatives	4 x 4 = 16	Any unsuitable vehicles entering site will be turned away Relocate services or re-route traffic away from any obstructions or services Physical protection to be provided to prevent striking any obstructions, eg goalposts and warning signs at overhead restrictions and services Provide physical protection and warning signs in all situations which have significant danger potential if struck by vehicles like LPG or Fuel storage areas A clearance of over 0.5 m needs to be maintained between any part of the machine, particularly the ballast weight, and the nearest obstruction	1 x 4 = 4
Persons at risk: All site operatives			
Serious or fatal injuries to site operatives or public from a restricted traffic route visibility	4 x 5 = 20	Design corners with clear sight lines or provide one-way traffic routes Where appropriate, fit mirrors to areas of restricted vision to aid visibility on traffic routes. If not practicable utilise second person to escort you out of obstructed egress/access Warning signs to be provided in any place where difficulty of vision expected from a vehicle Follow safe systems of work, eg traffic control and speed restriction	1 x 5 = 5
Persons at risk: All site operatives & public			

2.23.1 **Task:** Operating or manoeuvring vehicles on steep gradient or near edges

Hazard	Risk	Control measures	RR
Overturning of vehicle or fall into holes after breaching its edges	3 x 5 = 15	Ensure driver of vehicle is trained in safe operation and understands risks inherent with operating vehicles near edges or on gradients Remove, or re-route traffic away from steep gradients and edges where possible If possible, principal contractor to reduce gradients by levelling traffic routes Restrict vehicle use in hazardous areas to those vehicles designed to cope with the conditions Install protection to edges, eg stop blocks and warning signs etc	1 x 5 = 5
Persons at risk: All site operatives			

2.23.1 **Task:** Parking or securing vehicles

Hazard	Risk	Control measures	RR
Serious or fatal injuries sustained from unintended vehicle movement	3 x 5 = 15	Only competent persons to drive vehicles Provide site induction training about the site conditions and requirements when parking and operating vehicles Only vehicles with appropriate braking systems should be selected for the work and environment onsite Ensure effective inspection and maintenance procedures are put in place for all vehicles and their servicing Instruct drivers to test brakes before operating vehicles All vehicles to be parked on flat ground whenever possible, eys are to be removed from unattended vehicles at all times Chock wheels of vehicles and trailers as necessary when parked on sloping ground	1 x 5 = 5

Persons at risk: All site operatives & public

2.24 Using tipper lorries and lorry loaders

2.24.1 **Task:** Operating or manoeuvring tipper lorries and lorry loaders

Hazard	Risk	Control measures	RR
Overturning of rear-tipping lorries during tipping operations	4 x 4 = 16	Refer to using vehicles onsite risk assessment for general control of risks associated with operating or manoeuvring vehicles On unmade or uneven ground, tipper-trucks of Stability Category A or equivalent should be used When tipping, always tip on firm level ground, never tip on a slope or during high winds Ensure the load is evenly distributed in the body of the truck For articulated vehicles, ensure that the tractor is in line with the trailer body Ensure a competent signaller is on hand to supervise tipping operations Tip the load gradually so that it is discharged in a controlled manner Watch out for loads sticking, which could cause instability during tipping Lorry drivers should only stay in their cabs during loading operations if it is safe for them to do so	1 x 4 = 4

Persons at risk: All site operatives

2.25 Using hand tools

2.25.1 Task: Using portable hand tools

Hazard	Risk	Control measures	RR
Injuries to hands sustained from incorrect use of portable hand tools	4 x 2 = 8	Always choose the right tool for the job All operatives to be trained in the safe use of hand tools before starting works and have necessary experience to use each hand tool Tools used shall have inherent safety features where possible, such as retractable blades for knives Keep cutting tools sharp, so that they cut true without needing to be forced Tools should be checked regularly for damage and any item to be found damaged or defective taken out of use immediately	1 x 2 = 2

Persons at risk: User

2.25.1 Task: Using retractable knife

Hazard	Risk	Control measures	RR
Cuts to body or hands whilst using retractable knife	4 x 3 = 12	Retractable knife or chosen cutting device to be used that is suitable for the job, only utilise knifes with molded plastic guard or retractable blade Knives should be checked before use and fitted with a sharp blade before beginning work Knife to be stored in a safely away when not in use Damaged or defective tools to be discarded using appropriate methods if they cannot be repaired	1 x 3 = 3

Persons at risk: User

2.26 Using cartridge tools

2.26.1 Task: Using cartridge tools

Hazard	Risk	Control measures	RR
Injuries sustained from contact with cartridge projectiles	4 x 3 = 12	Only trained operatives in the safe use of cartridge tools may this tool Cartridge operated tools should NEVER be used in a careless manner A cartridge operated tool shall have a rigid, lockable box or case, provided with compartments, to contain the splinter guard; the operating and maintenance instructions and a pair of goggles Pins should not be driven through pre-drilled holes unless a special adapter is used which will ensure that the pin is guided right up to the instant of contact with the working surface When loading the tool there should be no need for more than light finger pressure to insert the cartridge. If more than that is necessary, the attempt to load should be abandoned and the tool returned for examination Cartridge operated tools should not be used in areas where there is flammable vapour or risk of dust explosion A tool should never be left unattended when loaded, and should only be loaded as the last operation immediately prior to firing	1 x 3 = 3

Persons at risk: User

2.26.1 Task: Use of cartridge tools

Hazard	Risk	Control measures	RR
Injuries from loss of balance whilst working at height with cartridge tools	3 x 3 = 9	General working from height shall follow the working from height risk assessment Anyone using a cartridge operated tool should do so only from a firm and stable position A scaffold is preferable to a ladder, because the pressure needed to cock a spring operated tool, and the instinctive reaction to the recoil;, may cause a workman standing on a ladder to overbalance If using a mobile tower, scaffold should be securely tied to the structure Consider using fall arrest systems when necessary	1 x 3 = 3
Persons at risk: User			

2.27 Plant lifting operations

2.27.1 Task: Plant lifting operations

Hazard	Risk	Control measures	RR
Serious injuries sustained from using unsafe or incorrect lifting equipment	4 x 5 = 20	All lifting equipment is to have a current test certificate where valid Be inspected prior to each and every use by the user The safe working loads shall not be exceeded under any circumstances	1 x 5 = 5
Persons at risk: All site operatives			
Injuries to unauthorised personnel gaining access to lifting area	4 x 4 = 16	All site operatives or public are not be allowed under a suspended load Only use trained competent personnel for lifting duties and one man to control lifting operation The use of a subcontracted work force should be minimised where possible to ensure efficient knowledge of safe method of working Areas shall be fenced off, signage applied to all lifting areas, and use banksman to warn any third parties No unauthorised personnel shall be allowed into or near the lifting areas All personnel involved in lifting operations to read and understand lifting plan with site supervisor	1 x 4 = 4
Persons at risk: All site operatives & public			
Serious injuries sustained from uncontrolled falling of loads	4 x 4 = 16	Lifting Operations are to strictly conform to LOLER regulations 1998 Lifting operations are to have correct documentation submitted including test certificates, qualifications, lift plan etc.	1 x 4 = 4
Persons at risk: All site operatives			

2.28 Using airless sprayer

2.28.1 Task: Using airless sprayer

Hazard	Risk	Control measures	RR
Exposure to excessive noise levels	4 x 3 = 12	Assessments of foreseen noise will be carried out, local authority will be informed if adjacent area is likely to be adversely affected Correct PPE including ear defenders will be used by user and any operatives in close proximity	1 x 3 = 3
Persons at risk: All site operatives & public			
Inhalation of paints, oils, mists causing death	5 x 5 = 25	Where possible deny access to unauthorised persons Only competent trained operatives to use this equipment PPE will be worn as directed in method statement Spaying machine and paint supply to be located in a secure area, clearly signed to warn of the dangers of spraying in the area Drip trays and spill packages to me made available in the area of work If work takes place in areas of poor ventilation, action will be taken to prevent a build up of paint vapour and mists Hose connections will be checked regularly for security and damage	1 x 5 = 5
Persons at risk: All site operatives			
Eye injuries from misuse or faulty equipment needing medical treatment	4 x 3 = 12	Sprayer to be are subject to planned maintenance and weekly examination Safety goggles to be worn at all times and as directed in method statement Equipment will never be left unattended, and turned of when not in use Direct cables, hoses etc in a manner so as not to cause slips, trips and falls in the work area	1 x 3 = 3
Persons at risk: User			

2.29 Using nail guns

2.29.1 **Task:** Using nail guns

Hazard	Risk	Control measures	RR
Noise, operative contact with projectile other contact through ricochets	4 x 4 = 16	Operatives are to be instructed in the correct method of use, inspection and maintenance requirements The gun is NOT to be used in the close proximity of other persons The gun is to be unloaded at all times when not in use The gun is to be unloaded when ladders are being climbed The gun is to kept locked up when not in use The workplace is to be kept clear and obstacle free to prevent trips Nail guns are only to be used in areas deemed safe to use by the site manager The gun is to be subject to a planned maintenance programme	1 x 4 = 4

Persons at risk: All site operatives

2.30 Using blow lamp or similar

2.30.1 **Task:** Using blow lamp or similar

Hazard	Risk	Control measures	RR
Serious injuries sustained from fire or explosions whilst using a blowlamp or similar for brazing/bronze welding (oxy-ccetylene & oxy-propane)	4 x 5 = 20	A hot work permit system should be implemented onsite by the principal contractor or client Site operatives must comply with safe procedures and manufacturers instructions whilst undertaking hot works Only suitably trained and competent personnel are permitted to carry out hot works User must ensure all combustible materials are removed, with flammable liquids and gas cylinders beyond the range of the blowtorch When using a blowtorch on metal surfaces, combustible material in contact with the metal behind or adjacent to the work area should be removed before work commences Keep a watch whilst work is in progress for signs of fire or smouldering in the immediate vicinity Ensure a portable fire extinguisher is readily available wherever and whenever hot works are in progress Always extinguish a blowtorch when not in use and never leave it burning unattended Ensure adequate ventilation where gas burning appliances are in use Ensure area is checked thoroughly at the end of the work period and signed off on hot works permit as being safe by site supervisor and user	1 x 5 = 5
Persons at risk: All site operatives			
Lung damage caused by inhalation of fumes (which may contain cadmium) and skin & eye damage from sealants	4 x 4 = 16	All substances required to perform plumbing activities are identified i.e., lead, solder, plumber flux etc. and the relevant COSHH Assessments and personal protective equipment is made available Consider use of respiratory equipment in confined areas Avoid skin contact with sealants and wash from skin as soon as possible All areas must be kept very well ventilated during sealant works and minimum requirement is to open all doors and windows	1 x 4 = 4

Persons at risk: User

2.31 Using mapress machine - 110v

2.31.1 Task: Operating Mapress machine

Hazard	Risk	Control measures	RR
Finger Injuries due to entrapment in pipe collars, laceration after contact with drill bit and electric shock (110 volt), personal injury, burns	3 x 4 = 12	Operator to be trained in safe use of mapress machine Hand protection recommended to be worn Equipment to be maintained in good working order Hands/arms and loose clothing to be kept clear of working area Equipment must have been subject to a test (P.A.T.). Daily inspection required by user	1 x 4 = 4
Persons at risk: User			
Ill-health from effect of vibration (Hand/Arm Vibration (HAV))	1 x 1 = 1	Daily usage time is not expected to exceed 40 minutes per person.The vibration level could be as high as 3.9 ms/2 Maximum usage time reach exposure action value (EAV) of 3.9 ms/2 (over an 8 hour period)(A8) is 5 hours per day	1 x 1 = 1
Persons at risk: User			

2.32 Mobile generator

2.32.1 Task: Positioning mobile generator

Hazard	Risk	Control measures	RR
Injuries sustained from slips, trips and falls or manual handling of mobile generator	4 x 3 = 12	Ensure the area around the generator is secure (exclude all movement) Ensure competent person supervises or carries out all work Ensure generator is correctly sited and segregated from pedestrian walkway Ensure all cables leading from generator are safe Ensure area/route is free from obstruction before carrying out task Ensure all operatives are competent in manual handling techniques Liaise with other operatives and contractors on site Reduce handling by using mechanical means where practicable / two person lift Use protective gloves and foot protection when handling machinery Ensure to seek assistance when the load is beyond the capability of the operative, i.e. 'team handling' Consideration should be given to the size, surface texture or nature of the load, does the centre of gravity shift Ensure leads from generator do not create trip hazards	1 x 3 = 3

Persons at risk: All site operatives

2.32.1 Task: Operating or refuling mobile generator

Hazard	Risk	Control measures	RR
Injuries sustained from fire or fumes whilst operating or refuelling mobile generator	3 x 5 = 15	Exhaust to be checked at intervals and correctly sited to ensure good ventilation Ensure to turn off generator before re-fuelling, and use funnel Ensure fuel for equipment is carried in an explosion proof and appropriate metal container which is secured in the transport vehicle Machine is to be fuelled away from the vehicle, visitors and members of the public Smoking is not permitted during refuelling and operation of this equipment Ensure fuel tank and cap is secure at all times Caution shall be exercised to prevent overfilling and spillage, all spillages will be cleaned up immediately	1 x 5 = 5

Persons at risk: All site operatives

2.32.1 Task: Operating mobile generator

Hazard	Risk	Control measures	RR
Electrical shock whilst operating mobile generator	3 x 5 = 15	Ensure equipment is maintained and inspected before use Equipment to be operated by a competent person Ensure all cables leading from generator are safe, electrically tested and tagged	1 x 5 = 5

Persons at risk: All site operatives

2.33 Working on fixed scaffolds

2.33.1 Task: Working on fixed scaffolds

Hazard	Risk	Control measures	RR
Persons struck by falling objects from above whilst working on fixed scaffolding	5 x 3 = 15	Provide safe walkways around and beneath scaffold with no trip hazards Protect against falling materials and debris Erect warning signage, sheeting, high visibility tape on standards, ledgers and transoms etc Install lighting to any paths Prevent unauthorised access onto scaffold by removing ladder	1 x 3 = 3
Persons at risk: All site operatives & public			
Electrocution from contact with overhead cables	3 x 5 = 15	The principal contractor will identify any possible risks associated with nearby power lines and scaffolding The principal contractor shall notify local authorities, request de-energisation or movement of cables Once working close to over head electrical cables agreed, local authority to ensure cabling is adequately insulated with sleeves	1 x 5 = 5
Persons at risk: All site operatives			

2.33.1 **Task:** Erecting and working on fixed scaffolds

Hazard	Risk	Control measures	RR
Falls or serious injury from collapse of structure due to unsafe erection	5 x 5 = 25	The site supervisor will ensure that all scaffolding requirements are properly planned to meet working requirements prior to commencement of work No person other than a competent scaffolder is permitted to alter, erect, dismantle or otherwise interfere with any scaffold erected on site The site supervisor will ensure that scaffold is safe to use by obtaining a hand over certificate, form 21 inspection report and appropriate signage is displayed on scaffold indicating it is safe to use for contractors The site supervisor will ensure that scaffold is further inspected at regular intervals not exceeding 7 days, after any substantial addition, dismantling or alteration and after any event likely to have affected its strength All inspections must be recorded	1 x 5 = 5

Persons at risk: All site operatives

2.34 Working within lofts

2.34.1 Task: Working within lofts

Hazard	Risk	Control measures	RR
Injuries sustained from working in confined, or poorly accessed space	4 x 3 = 12	All works within lofts will consider the Confined Spaces Regulations 1997 and undertake necessary confine spaces risk assessment if deemed necessary Sage access to loft must be from a secure ladder When working in lofts, temporary boards shall be used between gaps and fall spaces Adequate 110v temporary lighting must be provided by the contractor unless there is permanent lighting installed, back up torches should also be provided If the loft has already been insulated the operative should be aware of the hazards of MMMF, correct PPE shall be worn at all times. Any disturbance or removal of MMMF will require the operative to wear a disposable respirator	1 x 3 = 3

Persons at risk: User

2.35 Working on sloping roofs

2.35.1 Task: Working on sloping roofs

Hazard	Risk	Control measures	RR
Serious injuries sustained from slipping down roof or losing footing over roof eaves	4 x 4 = 16	All people accessing the roof shall understand the dangers, even if only working on the roof for a short time All operative's shall be trained in working from heights Gutters should not be used to support any ladder Full edge protection at eaves level will be required for work on sloping roofs that will be strong enough to withstand a person falling against it If the work requires access within 2 m of gable ends, edge protection will be needed there as well Roof workers should not work directly on slates or tiles, as they do not provide a safe footing, particularly when they are wet Use of roof ladders and proprietary staging to enable safe passage across a roof, and securely fixed by means of a ridge hook placed over the ridge, bearing on the opposite roof Falls will be minimised with the use of a fall arrest system if deemed necessary If falls arrest system implemented, emergency procedures shall be defined in method statement if accident occurs	1 x 4 = 4
Persons at risk: User			
Serious or fatal injuries from falls through gaps or leading edges	5 x 5 = 25	If the work involves any likelihood of access within 2 m of any gaps they should be covered with a material which is fixed in position and sturdy enough to take the weight of a person If this is not possible, edge protection will be provided around the gap or as a last resort install safety netting beneath the gap Nets and birdcage scaffolds will be employed to eliminate falls from edges, netting shall be installed as close as possible beneath the roof surface; securely attached and will withstand a person falling onto them; and installed and maintained by competent personnel Where netting is not reasonably practicable, using work restraint safety harnesses with running line systems will be employed	1 x 5 = 5
Persons at risk: All site operatives			

2.36 Working on flat roofs

2.36.1 Task: Working on flat roofs

Hazard	Risk	Control measures	RR
Serious or fatal injuries sustained from falling from edge or gaps in flat roof	5 x 5 = 25	Look at eliminating or substituting the need to work from height by implementing alternative tools or undertake works from below the roofing structure on a tower, scaffold or cherry picker Any areas of height at risk of serious or fatal injury needs to have a safe system of work employed by the site supervisor and include a permit to work system All site operatives working from height to be trained in the safe method of working from height by own company and inducted by site supervisor on safe system of work Edges and any openings will need protection during work and should be in place from start to finish of the work; aswell as strong enough to withstand people and materials falling against it Site supervisor to ensure any permanent or temporary access equipment that's been installed has been checked and maintained by competent person before, whilst and after using equipment	1 x 5 = 5

Persons at risk: All site operatives

2.37 Working on fragile roof structures at height

2.37.1 Task: Working on roof or potentially unsafe structures at height

Hazard	Risk	Control measures	RR
Potentially fatal or serious injuries caused by falls from unstable roof structure or other structures from height	5 x 5 = 25	Look at eliminating or substituting the need to work from height by implementing alternative tools or undertake works from below the roofing structure on a tower, scaffold or cherry picker Any areas of height at risk of serious or fatal injury needs to have a safe system of work employed by the site supervisor and include a permit to work system All site operatives working from height to be trained in the safe method of working from height by own company and inducted by site supervisor on safe system of work Site supervisor to ensure any permanent or temporary access equipment that's been installed has been checked and maintained by competent person before, whilst and after using equipment Where the perimeter scaffolding top working platform is located at a height of less than 950mm below wall-plate level then a safety decking system (lightweight working platform) must be erected at the top floor level to provide an effective passive collective fall prevention system All fragile surfaces which would be liable to break if a person worked on it or fell onto it like fibre and asbestos cement roof sheets and skylights should be identified by competent worker and all site operatives to be made aware of these fragile areas by the site supervisor before starting work Site supervisor will employ fixed walkways with guard rails to cross a fragile surface or use a use suitable working platform to avoid nearby fragile surfaces Falls will be minimised with the use of a fall arrest system if deemed necessary If falls arrest system implemented, emergency procedures shall be defined in method statement if accident occurs	1 x 5 = 5

Persons at risk: User

2.37.1 **Task:** Working at roof edge

Hazard	Risk	Control measures	RR
Serious injuries or fatalities from falling from roof edge or losing footing	5 x 5 = 25	Where work is carried out 2 m back from the roof edge and no edge protection is in place, working area shall be marked out tight supervision to be upheld Full edge protection (top rail, toe board and intermediate protection) is required whenever the work requires access within 2 m of the roof perimeter Edge protection to be provided by an independent scaffold company around the perimeter of the building or by barriers connected to the frame	1 x 5 = 5
Persons at risk: All site operatives			

2.38 Working from step ladders

2.38.1 **Task:** Working from step ladders

Hazard	Risk	Control measures	RR
Contact with over head cables causing possible fatal injury through electric shock	3 x 5 = 15	Check prevailing site condition Take care when erecting/positioning step ladders close to an services Do not erect step ladder in close proximity to a power cables - seek advice from supervisor before commencing with work	1 x 5 = 5
Persons at risk: User			
Head injuries caused by falling objects	5 x 3 = 15	Barrier off work area Take care when placing step ladder avoiding thorough fare of workers or public if possible When step ladder is secure, remove any dislogable items in close proximity Keep persons away from ladder and surrounding area when carrying out work	1 x 3 = 3
Persons at risk: All site operatives & public			

2.38.1 **Task:** Working from step-ladders

Hazard	Risk	Control measures	RR
Injuries sustained from the unsafe use of step-ladders	5 x 3 = 15	Operatives will ensure that step-ladders are only used for work that is short-term, of a light nature, that requires one hand to be used, and that can be done without stretching Inspect step-ladders before use to ensure that there are no obvious defects Do not paint stepladders, or use those that have been painted, painting can cover up defects Do not put step-ladders in front of doorways without taking appropriate precautions to prevent people bumping into them and never obstruct a fire exit with a ladder If the step-ladder is being erected in a public area or on a public path, then it is essential to provide proper protection for pedestrians or vehicles before the step-ladder is put up Wherever possible a step-ladder should be footed while someone climbs The step-ladder should be resting on a stable and secure surface The step-ladder should be placed away from overhead and wall mounted power cables Step-ladders should never be supported on the bottom rung but always on the feet Tools etc. should be carried in tool bags or belts rather than by hand, so that the step-ladder can be properly gripped during climbing Do not lean from ladders or stepladders	1 x 3 = 3

Persons at risk: User

2.39 Using personal fall arrest / fall restraint equipment

2.39.1 Task: working with fall arrest / restraint equipment

Hazard	Risk	Control measures	RR
Serious or fatal injuries from unsafe anchorage, and using unsafe or inappropriate fall protection systems	5 x 5 = 25	All fall protection systems are to be store in safe conditions All fall protection systems are installed by registered professionals and inspected before use Periodic inspection and certification of installations should be available before undertaking any work Do not use fall protection systems which are not within service inspection date and report out of date equipment as soon as possible When any device which has arrested a fall it must be taken out of service	1 x 5 = 5

Persons at risk: User

2.39.1 Task: Selecting correct fall arrest / restraint equipment to use for task

Hazard	Risk	Control measures	RR
Serious or fatal injuries sustained from the failure to observe good practice in fall protection equipment or misuse of equipment	5 x 5 = 25	Operatives shall be trained in the correct selection, inspection and use of fall arrest / fall restraint equipment Correct fall prevention/protection system must only be used for the specific task A qualified person must supervise the setting up of work and equipment A full body harness is always required when using fall protection equipment	1 x 5 = 5

Persons at risk: User

2.39.1 **Task:** Rescuing person from fall whilst using fall protection equipment

Hazard	Risk	Control measures	RR
Suspension trauma and orthostatic intolerance from fall and subsequent injuries from not having an effective rescue plan in place	4 x 5 = 20	Every precaution must be made to prevent operatives from falling in the first place Details of rescue procedure to be provided in a separate statement to all involved operatives on site The operatives are trained and competent in use of rescue equipment Sufficient number of trained and competent personnel on site The rescue procedure in place is practised on a regular basis and competence is maintained on record The selection of rescue equipment needs to be appropriate for the nature of work	1 x 5 = 5

Persons at risk: All site operatives

2.40 Preventing falling debris or tools from height

2.40.1 **Task:** Movement at height

Hazard	Risk	Control measures	RR
Serious or fatal injuries sustained from falling debris or tools	4 x 5 = 20	All site operatives to follow PPE requirements including wearing of hardhats on site Safe working areas to be cordoned off when any works are undertaken overhead All working platforms, scaffolding, mobile towers etc. to be erected by a competent person and to include any protection like toe boards to eliminate tools falling from height Any persons working from height to be trained in the safe use of tools, and to be made aware of the dangers from falling tools from above Any areas where the public are exposed to possible falling debris or tools to be protected by the use of safety nets, hoarding and other failsafe structures	1 x 5 = 5

Persons at risk: All site operatives & public

2.41 Working on podium steps

2.41.1 Task: Using podium steps

Hazard	Risk	Control measures	RR
Injuries sustained from the improper use of podium steps	4 x 3 = 12	Use the correct size podium for the job to avoid over-reaching Position the podium correctly to avoid over-reaching Only one operative to use the podium at one time Never stand on rails Always have both feet on the platform Never move a podium with materials or tools on it Never move a podium with a person on it Make sure the platform is not overloaded Position on flat, level, dry firm ground Make sure safety gate is shut and locked when you are on the podium Ensure the castors are pointing outwards and wheel brakes are locked Each day, before podiums are used the engineer will check the castors, guards, brakes, rungs, rails and platform to ensure that they are clean and safe Inspection records will be kept in site folder	1 x 3 = 3

Persons at risk: User

2.42 Using ladders

2.42.1 Task: Using ladders

Hazard	Risk	Control measures	RR
Unsafe or defective ladder failure causing serious injuries to user	4 x 4 = 16	A 'pre-use' check will be undertaken by the user at the beginning of the working day; before a task, and after something has changed, e.g. a ladder has been dropped or moved from a dirty area to a clean area (check the state or condition of the feet) The user will check the stiles – make sure they are not bent or damaged, as the ladder could buckle or collapse The user will check the feet – if they are missing, worn or damaged the ladder could slip. Also check ladder feet when moving from soft/dirty ground (e.g. dug soil, loose sand/stone, a dirty workshop) to a smooth, solid surface (e.g. paving slabs), to make sure the foot material and not the dirt (e.g. soil, chippings or embedded stones) is making contact with the ground The user will check the rungs – if they are bent, worn, missing or loose the ladder could fail The user will check any locking mechanisms – if they are bent or the fixings are worn or damaged the ladder could collapse. Ensure any locking bars are engaged. The user will check the stepladder platform – if it is split or buckled the ladder could become unstable or collapse Check the steps or treads on stepladders – if they are contaminated they could be slippery; if the fixings are loose on steps, they could collapse If you spot any of the above defects, don't use the ladder and notify site supervisor	1 x 4 = 4
Persons at risk: User			

Falls from height whilst using ladder	4 x 5 = 20	All users are trained in the safe use of ladders and working at height User will only carry light materials and tools on ladders User will not overreach whilst on ladder – user to make sure belt buckle (navel) stays within the stiles User to make sure ladder is long enough or high enough for the task User to ensure ladder is not overloaded – consider workers' weight and the equipment or materials they are carrying before working at height User to make sure the ladder angle is at 75° – you should use the 1 in 4 rule (i.e. 1 unit out for every 4 units up) User to always grip the ladder and face the ladder rungs while climbing or descending – user will never slide down the stiles User won't try to move or extend ladders while standing on the rungs User won't work off the top three rungs, and will ensure the ladder extends at least 1 m (three rungs) above area of working User not to stand ladders on moveable objects, such as pallets, bricks, lift trucks, tower scaffolds, excavator buckets, vans, or mobile elevating work platforms User to avoid holding items when climbing (consider using a tool belt) User won't work within 6m horizontally of any overhead power line, unless it has been made dead or it is protected with insulation. A non-conductive ladder (e.g. fibreglass or timber) will be used for any electrical work User will maintain three points of contact when climbing (this means a hand and two feet) and wherever possible at the work position Where user cannot maintain a handhold, other than for a brief period (e.g. to hold a nail while starting to knock it in, starting a screw etc), user will need to take other measures to prevent a fall or reduce the consequences if one happened For a leaning ladder, user will secure it (e.g. by tying the ladder to prevent it from slipping either outwards or sideways) and have a strong upper resting point, i.e. do not rest a ladder against weak upper surfaces (e.g. glazing or plastic gutters) and user could also implement an effective stability device	1 x 5 = 5

	Where ladders are operated by a single user, ladder will be fitted with relevant supports for one man use Where a task takes longer than 30 minutes, an alternative means of access should will be considered
Persons at risk: User	

2.43 Working by or over skylights

2.43.1 **Task:** Working by skylights

Hazard	Risk	Control measures	RR
Falls from height and falling materials causing serious injury or death	4 x 5 = 20	Client to provide lipped ply sheet covering over exposed skylight glass These are to moved along as works progress No works to be carried out in area around skylight unless sheets in place Extreme care should be taken when installing and moving ply sheets so as to ensure no damage is done to the skylights	1 x 5 = 5
Persons at risk: All site operatives			

2.44 Pitched roof ladder access

2.44.1 Task: Using ladders as working platform

Hazard	Risk	Control measures	RR
Incorrect ladder selection, use or failure of ladder causing serious injuries or death	4 x 5 = 20	Ladder to be must be EN131 and Class 1 Industrial Duty Ladder must be suitable for its intended use and environment Ladders must be set on a firm level base and either tied off or mechanically secured at base and along length Ladders must be regularly inspected and maintained free from defects Correct erecting and lowering procedures are to be observed Only one person to be on a ladder at one time Materials / tools should be delivered to the work area by other means and not carried up ladders When using a ladder ensure that you have three points of contact with the ladder at all times Observe good lifting techniques when moving ladders	1 x 5 = 5
Persons at risk: User			

2.45 Rescue plan

2.45.1 Task: Rescuing persons from MEWP

Hazard	Risk	Control measures	RR

Falls from height to all involved persons during rescue	5 x 5 = 25	Under normal circumstances, back-up systems built into the machine will allow the operator to bring the platform of the machine to ground level under controlled conditions. In unlikely scenario when backup plant fails, ensure all normal emergency lowering procedures have been activated. Contact the site manager to report failure of back-up emergency lowering systems and request engineering back-up. If, after inspection by the engineer, it is not possible to effect a repair to allow the machine to be brought to the ground, the site manager must be contacted for permission to carry out basket to basket rescue. The details of the risk assessment carried out shall be recorded onto the site specific risk assessment form and follow BS8460 section 6.6 Rescue from height. Only a person fully trained in rescuing from height may attempt a rescue. The rescue machine must be positioned so as to enable the rescue procedure to be carried out without compromising the safety of personnel involved in the rescue. The platforms of both machines must be adjacent to each other with a minimal gap between them unless exceptional circumstances mean this is not possible. (Where this is not possible, the circumstances shall be recorded onto the risk assessment form.) A double lanyard must be attached to the person being rescued and the anchor points on both machines before the rescue takes place. Care must be taken not to overload the rescue machine. This may mean making more than one journey to complete the rescue. Where alternative emergency systems are not possible, consideration should be	2 x 5 = 10

	given for the use of an emergency evacuation system, examples of which are: control descent systems, crane basket rescue.
Persons at risk: All site operatives	

2.46 Movement of boxed materials

2.46.1 Task: Movement of general boxed materials

Hazard	Risk	Control measures	RR
Injuries sustained from incorrect manual handling of boxed materials	4 x 3 = 12	All hazardous manual handling operations should be avoided so far as is reasonably practicable The workforce will be trained to observe safe lifting techniques, and safely handle loads for materials of boxed materials Any heavy or awkward loads should be moved using a handling aid If not using handling aids, consider reducing weight of load by breaking up materials to a more manageable size If breaking up into smaller loads consider frequency of bending and how this can be managed efficiently with site operatives Consider lifting in teams if load is already considered within acceptable limits Any of the regular shaped materials should be light, stable and unlikely to shift or move during lifting Before undertaking any manual handling operations, make sure the route is clear of obstructions and somewhere to put the load down wherever it is to be moved to All operatives to be wearing correct PPE for the job The operative should stand as close to the load as possible, with feet spread to shoulder width, bent knees and the back in a natural, upright posture The user should grasp the load firmly and as close to the body as possible The legs should be used to lift the load in a smooth motion, this offers more leverage reducing the strain on the user's back Carry the load close to the body with the elbows tucked into the body Avoid twisting the body as much as possible by turning your feet to position yourself with the load Reduce the risk of injury so far as is reasonably practicable	1 x 3 = 3

Persons at risk: User

2.47 Moving of general materials of normal size and shape

2.47.1 Task: Moving of materials of a regular shape and size

Hazard	Risk	Control measures	RR
Injuries sustained from incorrect manual handling of materials with a regular shape and size	4 x 3 = 12	All hazardous manual handling operations should be avoided so far as is reasonably practicable The workforce will be trained to observe safe lifting techniques, and safely handle loads for materials of regular shape or size Any heavy or awkward loads should be moved using a handling aid If not using handling aids, consider reducing weight of load by breaking up materials to a more manageable size If breaking up into smaller loads consider frequency of bending and how this can be managed efficiently with site operatives Consider lifting in teams if load is already considered within acceptable limits Any of the regular shaped materials should be light, stable and unlikely to shift or move during lifting Before undertaking any manual handling operations, make sure the route is clear of obstructions and somewhere to put the load down wherever it is to be moved to All operatives to be wearing correct PPE for the job The operative should stand as close to the load as possible, with feet spread to shoulder width, bent knees and the back in a natural, upright posture The user should grasp the load firmly and as close to the body as possible The legs should be used to lift the load in a smooth motion, this offers more leverage reducing the strain on the user's back Carry the load close to the body with the elbows tucked into the body Avoid twisting the body as much as possible by turning your feet to position yourself with the load Reduce the risk of injury so far as is reasonably practicable	1 x 3 = 3

Persons at risk: User

2.48 Moving pipes, rolls or irregular shaped or sized materials

2.48.1 Task: Moving pipes, rolls or irregular shaped or sized materials

Hazard	Risk	Control measures	RR
Injuries sustained from incorrect manual handling of pipes, rolls or irregular shape or sized materials	4 x 3 = 12	All hazardous manual handling operations should be avoided so far as is reasonably practicable The workforce will be trained to observe safe lifting techniques, and safely handle loads for materials of regular shape or size Any heavy or awkward loads should be moved using a handling aid If not using handling aids, consider reducing weight of load by breaking up materials to a more manageable size If breaking up into smaller loads consider frequency of bending and how this can be managed efficiently with site operatives Consider lifting in teams if load is already considered within acceptable limits It may be possible to roll drums of cable, this should be undertaken as a last resort if the above fails; the area should be cleared and movement of drum controlled by a team of operatives Before undertaking any manual handling operations, make sure the route is clear of obstructions and somewhere to put the load down wherever it is to be moved to All operatives to be wearing correct PPE for the job The operative should stand as close to the load as possible, with feet spread to shoulder width, bent knees and the back in a natural, upright posture The user should grasp the load firmly and as close to the body as possible The legs should be used to lift the load in a smooth motion, this offers more leverage reducing the strain on the user's back Carry the load close to the body with the elbows tucked into the body Avoid twisting the body as much as possible by turning your feet to position yourself with the load Reduce the risk of injury so far as is reasonably practicable	1 x 3 = 3

Persons at risk: All site operatives

2.49 Cable pulling

2.49.1 Task: Cable pulling

Hazard	Risk	Control measures	RR
Injuries sustained from incorrect pulling of new runs of cables	4 x 3 = 12	All hazardous manual handling operations should be avoided so far as is reasonably practicable The workforce will be trained to, observe safe lifting techniques, and safely handle loads for materials of regular shape or size Any heavy or awkward loads should be moved using a handling aid Consider pulling in teams as long as controlled and a continuous tension implemented on the cable Before undertaking any manual handling operations, make sure the route is clear of obstructions Cable drums should positioned in an area that allow a straight pull The use of cable rollers or holders should be implemented to ensure as much friction is reduced as possible All operatives to be wearing correct PPE for the job, including hard hat, gloves, hi vis vest and safety glasses All operatives to pull cables on firm ground, avoiding twisting the body as much as possible by position one self with the load Cables shouldn't be pulled above the shoulders or below the torso of the user Reduce the risk of injury so far as is reasonably practicable	1 x 3 = 3

Persons at risk: User

2.49.1 Task: Pulling cables at height

Hazard	Risk	Control measures	RR
Falls from height whilst pulling cables	4 x 3 = 12	All operatives to pull cables on firm and level ground from selected access equipment Risk assessments for specific access equipment used will be followed at all times	1 x 3 = 3

Persons at risk: User

2.50 General carpentry works

2.50.1 Task: General joinery works

Hazard	Risk	Control measures	RR
Workers risk serious and possibly fatal cut injuries following contact with moving parts of machinery, particularly saw blades	4 x 5 = 20	Refer to hand tool risk assessment for safe use of machinery All machines guarded according to manufacturers' instructions Guards inspected regularly and maintained as necessary to ensure their good condition Workers have sufficient space at machines to work safely All workers trained in safe use of machines by a competent person	1 x 5 = 5
Persons at risk: User			
Lung, skin & eye damage caused by exposure to wood dust during sanding or cutting	4 x 4 = 16	Ensure workers never dry sweep wood dust, which will only spread the dust around Wood dust cleared up using a suitable vacuum cleaner, fitted with an appropriate filter Safety goggles worn when cutting wood Any cutting to be completed in a well ventilated area where possible Ensure first aid kit contains eye wash or an eye wash station is provided in close proximity to cutting area	1 x 4 = 4
Persons at risk: User			
User susceptible to back injury and long-term pain if regularly lifting or carrying heavy or awkward objects, also risk cuts when tooling, or splinters	4 x 3 = 12	Refer to method statement on safe lifting techniques Workbenches and machine tables set at a comfortable height to work from Appropriate gloves provided for handling tooling and protection from splinters	1 x 3 = 3
Persons at risk: User			

The inhaling of hazardous substances such as MDF which may induce difficulties breaking or cause asthma to some	4 x 4 = 16	A lower risk alternative should be always used as a first option where one exists. Eg. use a 'no added formaldehyde' MDF board or low-emission MDF board if practicable to do so Ensure a designated cutting station/area is located onsite away from other workers in a well ventilated area Dust masks to be used at all times when cutting or sanding Use an effective dust extraction system whenever MDF is machined or sanded as a minimum requirement, all cutting to be undertaken in a well ventilated area Use vacuum cleaners with high performance filters (HEPA) to clean up MDF dust Ensure good housekeeping onsite, 'clean as you go' is implemented across the site	1 x 4 = 4
Persons at risk: All site operatives					

2.51 Buried services

2.51.1 Task: Carrying out work on or near underground services

Hazard	Risk	Control measures	RR
Severe or potentially fatal burns to the hands, face and body caused by the explosive effects of arcing current when a live cable is penetrated by a sharp object such as the point of a tool	5 x 5 = 25	Anyone planning to supervise or undertake work to have sufficient skills, knowledge and experience to do so safely Obtain service drawings from utilities companies or client with relevant information about the site Survey the site to identify the services and other underground structures, record the location of any services, relying on plans is not sufficient Review/assess the planned work to avoid disturbing services where possible, where not possible develop plans to minimise the risk of damage to those services in the work area Allow sufficient time and provide sufficient resource to do the work safely Avoid using hand-held power tools over the buried electrical cables, never assume depths; you may find cables at shallower depths than 450mm Final exposure of the service will be undertaken by horizontal digging and all tools will be insulated when digging near electric cables Once exposed, services should be supported where necessary and shouldn't be used as handholds or footholds for climbing out of excavations If cable is struck with a mechanical digger, drivers should be instructed to stay in the cab Emergency work still requires planning and assessment of the risks arising from the work, a precautionary approach must still be taken when breaking ground	1 x 5 = 5

Persons at risk: User

2.51.1 **Task:** carrying out work on or near underground services

Hazard	Risk	Control measures	RR
Damage to gas pipes and connections causing leaks resulting in fire or explosion	5 x 5 = 25	Anyone planning to supervise or undertake work to have sufficient skills, knowledge and experience to do so safely Obtain service drawings from utilities companies or client with relevant information about the site Survey the site to identify the services and other underground structures, record the location of any services, relying on plans is not sufficient Review/assess the planned work to avoid disturbing services where possible, where not possible develop plans to minimise the risk of damage to those services in the work area Allow sufficient time and provide sufficient resource to do the work safely Locate PE gas pipes by hand digging before mechanical excavation begins, do not use mechanical excavators within 500 mm of a gas pipe Mechanical excavation around gas services should be carefully managed and planned and only used where hand tools are not sufficient When mechanical excavation is undertaken, another person should assist the excavator driver, from a position where they can safely see into the excavation and arn the driver of any services or other obstacles Final exposure of the service will be undertaken by horizontal digging and all tools will be insulated when digging near electric cables Once exposed, services should be supported where necessary and shouldn't be used as handholds or footholds for climbing out of excavations Where striking of gas supply has taken place, prohibit smoking, and extinguish all naked flames and other sources of ignition within at least 5 m of the leak, evacuate everyone from the immediate vicinity, warn the occupants to leave the building, and any adjoining building, inform the gas distribution network operator Emergency work still requires planning and assessment of the risks arising from the work, a precautionary approach must still be taken when breaking ground	1 x 5 = 5

Persons at risk: All site operatives & public

Damage to surrounding property and financial loses when striking a water supply pipe	4 x 3 = 12	Anyone planning to supervise or undertake work to have sufficient skills, knowledge and experience to do so safely Where work is carried out near water mains, obtain plans from the relevant water company and use a pipe locator Plastic pipes will not be detectable by most detecting devices, therefore follow safe digging practices, using hand tools as far as practicable At bends in mains, concrete thrust blocks may be used, under no circumstances will thrust blocks or the ground supporting them be disturbed Support exposed water pipes, as necessary, and use the correct method of backfilling If a water pipe or its wrapping is damaged, inform the relevant water company or water authority – and the owners of any other underground services which may be affected – immediately. Never make unauthorised repairs.	1 x 3 = 3
Persons at risk: User			

2.52 Delivery and collection of scaffolding

2.52.1 Task: Delivery and collection of scaffolding by hand

Hazard	Risk	Control measures	RR
Impact or collision with persons, property and or vehicle whilst delivering or collecting scaffolding by hand	4 x 2 = 8	Use only trained, competent and skilled drivers/operatives Driver to be made familiar with the site layout before arrival, and entry and reversing operations to be supervised at all times Scaffolders to undergo site induction and made aware work areas Scaffolders to wear PPE as per method statement at all times Site supervisor to install exclusion zones and display clearly all relevant signage If works are on the public highway, cones and signage must be in place together with pedestrian management Access ladder onto trailer and hand rails or other type of fall prevention to be in place providing safe access onto vehicle, with materials banded wherever possible Access-ways and drive through routes to be kept clear and unobstructed at all times	1 x 2 = 2

Persons at risk: All site operatives & public

2.52.1 Task: Offloading and loading of scaffolding materials using lorry mounted crane

Hazard	Risk	Control measures	RR
Impact or collision with persons, property and or vehicle whilst delivering or collecting scaffolding by lorry mounted crane	5 x 3 = 15	Use only trained, competent and skilled operators of lorry mounted crane Exclusion zones will be in place and relevant signage displayed clearly before unloading or loading any scaffolding materials Use only certified lifting and well maintained lifting gear, all lifting gear will be inspected regularly by trained operative at main depot Loads may only be lifted below safe working load of 1 TON Vehicle will be parked on safe and level ground with outriggers extended as necessary	1 x 3 = 3

Persons at risk: All site operatives & public

2.53 Erecting / dismantling scaffolding systems

2.53.1 Task: Raising or lowering scaffold materials

Hazard	Risk	Control measures	RR
Injuries sustained from strains, pulled muscles, impact injuries or rope burns whilst handling scaffold materials	4 x 3 = 12	When lifting/carrying scaffolding materials only carry recommended amounts Tie materials correctly when using a gin wheel and rope, if passing hand to hand, ensure receiver has the material in grasp before releasing Wear correct PPE at all times Only competent operatives to erect scaffolding and will use correct manual handling techniques Check gin wheel and rope in good order, exclusion zone in place	1 x 3 = 3

Persons at risk: All site operatives & public

2.53.1 Task: Installation of ties, ring bolts, anchors etc

Hazard	Risk	Control measures	RR
Serious injuries sustained to from collapse of structure	3 x 5 = 15	Test minimum of 3 anchors and at least 5% of total job Ties/anchors & physical to be fixed/removed as works progress	1 x 5 = 5

Persons at risk: All site operatives & public

2.53.1 **Task:** Erecting or dismantling either tube and fitting or system scaffolding from height

Hazard	Risk	Control measures	RR
Serious or fatal injuries to operatives from height whilst erecting or dismantling scaffolding	5 x 5 = 25	Safe system of work in place and briefing given to operatives Use only trained, competent and skilled drivers/operatives Correct PPE to be worn at all times including fall arrest systems Install exclusion zone below the work area Keep scaffold materials clear of buildings when lifting Progressively position and fix ladders All work to be carried out within the SG4:10 NASC Guidance Erect ties as work proceeds Cease work if adverse weather prevails Close supervision of work force	1 x 5 = 5

Persons at risk: User

2.53.1 **Task:** Rescue of someone who's had a fall when harness is attached to anchor point

Hazard	Risk	Control measures	RR
Suspension trauma and potential injury to those carrying out the rescue	5 x 4 = 20	Fall prevention must be considered in the first instance, install span-set running lines, inertia blocks and protection decks It is important that a rescue plan is in place and understood by the scaffold operatives before work commences See specific rescue plan supplied by site supervisor	2 x 4 = 8

Persons at risk: User

2.53.1 **Task:** Erecting or dismantling haki roofing system from height

Hazard	Risk	Control measures	RR
Falls of men and materials	4 x 4 = 16	Pre-dismantle checks to be undertaken, ties, boards, guard rails, and ensure scaffold is cleared of debris by user/main contractor Follow haki roof system user guide when erecting/dismantling Install exclusion zone below the work area Install span set running lines and retractable inertia blocks to Haki system temporary roof	1 x 4 = 4

Persons at risk: All site operatives

2.53.1 Task: Incomplete platforms

Hazard	Risk	Control measures	RR
Fall of men and materials causing serious or fatal injuries from incomplete platforms	5 x 5 = 25	Installation of hard barriers and relevant warning signage clearly displayed, to prevent access	1 x 5 = 5

Persons at risk: All site operatives & public

2.53.1 Task: Collapse of scaffold when erected and during erection or dismantle

Hazard	Risk	Control measures	RR
Serious or fatal injuries from falling materials or men	4 x 5 = 20	Operatives must inspect material prior to erection Client and other contractors to use the scaffold in accordance with the loading specified on the hand-over certificate/scaffold tag No modifications will be made to the scaffold, especially removal of ties or structural members - any modifications will be approved by scaffolding supervisor Scaffolds to be physically tied throughout all stages of erection and dismantling Levels of materials stored on the scaffold should be kept to the lowest possible level at all times and offloaded safely when ever possible Scaffolds to be located upon firm and solid foundations that are capable of withstanding all impose loading	1 x 5 = 5

Persons at risk: All site operatives & public

2.54 Raising / lowering materials by Ginny wheel and rope

2.54.1 **Task:** Operating Ginny wheel and rope

Hazard	Risk	Control measures	RR
Overloading, or incorrect installation leading to falling materials or collapse causing serious injuries or fatality to those on ground level	4 x 5 = 20	All operatives shall work under the full supervision of the lead scaffolder who shall supervise the rising and lowering of all materials All associated lifting equipment & support must be inspected prior to use by the lead scaffolder The Ginny wheel shall thoroughly examined before use and suitably fixed at 2 points and restrained by using load bearing couplers only Loading shall not exceed 50kg and no one to stand under any raised or lowered loads When the working platform is used for storage, toe boards and a fully board platform shall be installed progressively to prevent materials falling from any level A safety zone will be created using suitable physical barriers with all the necessary warning signs to control and divert persons at risk away from the work area	1 x 5 = 5

Persons at risk: All site operatives & public

2.55 Excavation

2.55.1 Task: Excavation of soil

Hazard	Risk	Control measures	RR
Soil collapse from excavation, fatally trapping workers	5 x 5 = 25	Provide ground condition reports to all contractors making them aware of conditions Provide information on underground structures, water courses and location of existing services to all contractors involved Ensure safe access and egress provided to all excavation with secured ladder or steps extending allowing for 1 meter above excavation for safe egress/access Shore or step excavations, and ensure all materials are available onsite before works starts - don't assume ground will stand unsupported Make sure any adjacent structures are not undermined – dig well away from them Undertake battering of excavation sides to a safe angle of repose as needed - the angle of slope should be less than the natural angle of repose of the material being excavated, in wet ground a considerably flatter slope will be required Support the excavation as work proceeds Check the excavation each day before work starts and after any event that may affect its stability – eg a fall of material or poor weather. Keep records so people can be sure it is safe for work to continue	1 x 5 = 5

Persons at risk: User

2.55.1 **Task:** Movement of plant above excavation

Hazard	Risk	Control measures	RR
Surcharging of soil and collapse of excavations trapping or pulling in workers to excavation	4 x 5 = 20	Vehicle routes to be planned out before works are undertaken, and suitable barriers installed to maintain a safe distance from the excavation edge Horizontal loads should be assessed by a competent person and the excavation supports that are installed should be designed to resist them Spoil from excavations to be placed away from the side of an excavation by a distance of 1.5 m. Where the excavation depth exceeds 1.5m, this distance needs to equal the depth of the excavation If any boulders present in spoil, these are to be pushed into the spoil heap with the excavator bucket Temporary support shall be strengthened where buildings and other structures will create a surcharge, to take account of the additional loading to the ground Additional temporary support is provided for work on sloping sites where there is surcharging on the uphill side of the excavation	1 x 5 = 5

Persons at risk: All site operatives

2.55.1 **Task:** Working within excavations

Hazard	Risk	Control measures	RR
Falling or dislodging material causing injuries to site staff	5 x 3 = 15	Head protection to be worn at all times Install edge protection including toeboards, projecting trench sheets or box sides to protect against falling materials Check excavations do not undermine scaffold footings, buried services or the foundations of nearby buildings or walls, and seek guidance from an engineer whether extra support for any nearby structures is needed Do not park plant and vehicles close to the sides of excavations, these extra loadings can make the sides of excavations more likely to collapse	1 x 3 = 3
Persons at risk: All site operatives			
Asphyxiation caused by contamination of oxygen	4 x 5 = 20	Excavations are considered a confined space, and risk assessment shall be undertaken when planning to work within excavations that test for low oxygen, toxic gases, and hazardous fumes Any plant being used for or near excavations shall be positioned away to ensure diesel fumes do not flow down into excavation pit whilst workers are working within excavations	1 x 5 = 5
Persons at risk: All site operatives			

2.55.1 **Task:** Movement above excavation

Hazard	Risk	Control measures	RR
Site staff falling into excavations suffering serious injuries	5 x 4 = 20	Edges of excavations to be protected with substantial barriers where people are liable to fall into them Guard rails and toe boards inserted into the ground immediately next to the supported excavation side; or fabricated guard rail assemblies that connect to the sides of the trench box; or the support system itself, e.g. using trench box extensions or trench sheets longer than the trench depth	1 x 4 = 4
Persons at risk: All site operatives			

2.56 Demolition of brickwork

2.56.1 **Task:** Demolition of brick wall

Hazard	Risk	Control measures	RR
Unexpected collapse of brick structure causing serious or fatal injuries	4 x 5 = 20	A full demolition plan should be implemented before undertaking any work All demolition work to be undertaken by competent worker who has been trained safe demolition of brickwork walls, structures and openings Exclusion zones are established to keep unauthorised people outside of potential collapse zones and areas affected by rebounding material Safety glasses, a dust mask, gloves and long-sleeved clothes are worn as protection from flying objects and dust Hearing protection is worn to protect against excessive noise levels Workers do not work from the top of a wall that is being demolished A wall is not to be permitted to stand unless it is effectively supported against collapse and includes checking whether the wall to be demolished is providing support for other walls When removing entire wall sections using manual demolition methods that incorporate hand tools, such as jackhammers, sledge hammers, and picks, avoid weakening the wall Never taking down multiple rows of brick at once or starting at the bottom of the wall Removing the top course of bricks using a hammer and chisel Finish an entire row before starting the next	1 x 5 = 5

Persons at risk: All site operatives

2.56.1 Task: demolition of brick wall to create opening

Hazard	Risk	Control measures	RR
Unexpected collapse of brick opening from lack of support, causing serious or fatal injuries	4 x 5 = 20	When removing a portion of a wall where masonry will remain above the opening (eg to install a door or window), the upper area of masonry should be supported prior to commencing demolition and the demolition should commence at the top of the intended opening	1 x 5 = 5

Persons at risk: User

2.57 Safe storage of steel

2.57.1 Task: Safe storage of steel

Hazard	Risk	Control measures	RR
Injuries caused by being struck or crushed by moving steel stock	4 x 5 = 20	Storage and handling systems and work equipment subject to the legal requirements stated in the Workplace (Health, Safety and Welfare) Regulations 1992 or the Provision and Use of Work Equipment Regulations (PUWER) and the Lifting Operations and Lifting Equipment Regulations (LOLER) and shall be followed at all times Stock should be stored and stacked so that it is not likely to fall or move and cause injury Any storage racking used must be designed to be strong and stable enough for the loads placed on it Likely damage, for example from lift trucks, should be taken into consideration when installing any storage racking, and must be properly installed, regularly inspected, maintained and safely used	1 x 5 = 5

Persons at risk: All site operatives

2.58 Welding

2.58.1 Task: Operating oxy/fuel gas torches

Hazard	Risk	Control measures	RR
Fire caused by heat, sparks, molten metal or direct contact with the flame	5 x 3 = 15	The workpiece shall be moved to a safe location for carrying out hot work Remove nearby combustible materials such as flammable liquids, wood, paper, textiles, packaging or plastics from working area Protect nearby combustible materials that cannot be moved. Use suitable guards or covers such as metal sheeting, mineral fibre boards or fire-retardant blankets Area will be checked for any combustible materials hidden behind walls or in partitions Flame-resistant sheets or covers will be used to prevent hot particles passing through openings in floors and walls doorways, windows, cable runs, etc. If the consequences of a fire are severe, a fire watch during and after the work finishes will be implemented Flame, heat, sparks or hot spatter will be prevented from landing on the hoses Fire extinguishers will be kept nearby at all times	1 x 3 = 3
Persons at risk: All site operatives			
Flashbacks causing equipment to fail or explosion of cylinders	3 x 3 = 9	Use the correct lighting-up procedure, purging hoses before lighting the torch Remove any potentially explosive gas mixtures use a spark igniter and light the gas quickly after turning it on Make sure the blowpipe is fitted with spring-loaded non-return valves Use the correct gas pressures and nozzle size for the job Equipment to be maintained regularly and kept in good condition	1 x 3 = 3
Persons at risk: User			

Fire or burns from misuse of oxygen	5 x 3 = 15	Never use oxygen to blow dust off clothing Never attempt to improve air quality inside confined spaces by releasing oxygen in the space Never allow oil or grease to come into contact with oxygen valves or cylinder fittings Only use equipment designed for use with oxygen	1 x 3 = 3
Persons at risk: User			
Contact burns to operative	5 x 3 = 15	Work in a safe location away from other people User to wear protective clothing, boots, gauntlets and eye protection Shut off the torch when not in use. Do not leave a lighted torch on a bench or the floor as the force of the flame may cause it to move Always clamp the workpiece, avoid holding it by hand	1 x 3 = 3
Persons at risk: All site operatives			

2.58.1 **Task:** Operating oxy/fuel gas torches on tanks or drums

Hazard	Risk	Control measures	RR
Explosion when cutting up or repairing tanks or drums containing flammable material (solid, liquid or vapour)	3 x 5 = 15	Never use an oxy/fuel gas blowpipe on a drum or tank that has contained, or may have contained, flammable material	1 x 5 = 5
Persons at risk: User			

2.58.1 **Task:** Operating or transporting oxy/fuel gas equipment

Hazard	Risk	Control measures	RR
Fire or explosion caused by gas leaks	3 x 5 = 15	When job is finished, turn gas supply off at cylinder or before the cylinders are moved or transported Isolate and purge or remove hoses and equipment from enclosed or poorly ventilated spaces when there is a break in work Keep hoses away from sharp edges and abrasive surfaces or where vehicles can run over them Do not allow hot metal or spatter to fall on hoses All equipment will be maintained by a trained operative and all connections and equipment checked for faults and leaks weekly when in heavy use Any leak detection will be undertaken by a trained operative, using proprietary leak detecting spray or solution suitable for use with oxy/fuel systems and make immediate repairs as necessary	1 x 5 = 5
Persons at risk: User			
Crushing or impact injury when handling and transporting cylinders	4 x 3 = 12	Cylinders will be secured in transport so they don't come loose in an accident Cylinders will be prevented from falling or being knocked over by securing them with a stout chain or strap Avoid moving a cylinder by tilting it on its base and rolling it, always use a trolley to transport	1 x 3 = 3
Persons at risk: User			

2.58.1 **Task:** Flame cutting

Hazard	Risk	Control measures	RR
Fumes created during flame cutting	4 x 3 = 12	Any flame cutting on clean and unpainted metal outdoors will typically not require operative to wear RPE Any exterior work shall be undertaken where possible in a position where the wind blows the fume cloud away from the user and other people near by Flame cut indoors or in conditions were there is little air movement will require extraction and/or RPE depending on how much cutting operative is planning to do Working on materials coated with lead or chromate paints, galvanised or cadmium plated or metal contaminated with oil, grease etc will require fume control such as extraction and/or RPE	1 x 3 = 3

Persons at risk: All site operatives

2.58.1 **Task:** Storing and transporting cylinders

Hazard	Risk	Control measures	RR
Fire or explosion caused when storing and transporting cylinders	3 x 5 = 15	Close the cylinder valves when the equipment is not in use Store gas cylinders outside whenever possible, or in a well-ventilated place	1 x 5 = 5

Persons at risk: User

2.59 Pouring concrete

2.59.1 Task: Pouring concrete

Hazard	Risk	Control measures	RR
Contact with wet concrete to the skin and eyes causing severe chemical burns	5 x 4 = 20	Inform site operatives of hazards associated with concreting and the control measures to be implemented Appropriate PPE inlcuding safety glasses to be worn at all times, and monitored for compliance throughout the pouring Suitable welfare facilities for washing and immediate first aid (eye irrigation) facilities to be provided by client or principal contractor Provide health surveillance for workers who will be working with wet cement on a regular basis, and ensure operatives wash the skin with warm water and soap, or other skin cleanser, and dry after completing work or when necessary	1 x 4 = 4
Persons at risk: User			
Failure of support systems and/or platform before, during or after pouring causing injuries to those in vicinity	4 x 5 = 20	All concrete support systems are to be installed by competent persons Inspect all support systems and platforms immediately prior to the pour Use an appropriate means of pouring/delivering the concrete Monitor support systems during the pour, particularly leading edge protection	1 x 5 = 5
Persons at risk: All site operatives			
Entanglement of persons with moving parts of site plant	3 x 5 = 15	Ensure only a competent person may operate site plant Do not wear loose clothing that could be caught in rotating/ moving parts Ensure all moving parts (where there is a risk of entanglement) are guarded, or other suitable measures are in place Do not climb inside concrete drums Do not reach into rotating drums with hand/arm or shovel	1 x 5 = 5
Persons at risk: User			

2.59.1 **Task:** Walking across formwork

Hazard	Risk	Control measures	RR
Trips/falls particularly due to concrete reinforcement bars and risk of being impaled when falling	4 x 5 = 20	Operatives to be briefed regarding the risk and safety awareness during induction and before task When practicable lay a board across kicker bars until immediately before the pour Ensure caps to reinforcement bars are installed where possible before the pour	1 x 5 = 5

Persons at risk: All site operatives

2.59.1 **Task:** Gross spillage of material

Hazard	Risk	Control measures	RR
Spillage of concrete material causing damage to environment	3 x 3 = 9	Where practicable allow spills to set and lift If this is not an option, lift the wet product with suitable equipment (depending on quantity split) into a suitable receptacle for later disposal Dispose of via authorised site or in accordance with Local Authority requirements Avoid spills into natural watercourses due to the alkalinity of the product	1 x 3 = 3

Persons at risk: All site operatives & public

2.60 Using concrete blocks

2.60.1 Task: Moving blocks around site to load out

Hazard	Risk	Control measures	RR
Strains from weight of Blocks or falls form height	3 x 3 = 9	Depending on size of the blocks, separate if required to reduce weight Ensure the locks are mechanically loaded as near to work point as possible Ensure either safety netting or air bags are placed in the void below the work area Stop work in severe weather or when you think conditions become unsafe and consult management	1 x 3 = 3

Persons at risk: User

2.60.1 Task: Cutting blocks

Hazard	Risk	Control measures	RR
Breathing in of dust created whilst cutting and injuries to eyes	3 x 2 = 6	Ensure cutting is carried out in a well ventilated area Wear a dust mask if prolonged cutting is to be carried out or working on a poorly ventilated area Ensure goggles are worn when using abrasive wheels Ensure operatives have had abrasive wheel training Ensure disposable coveralls are worn	1 x 2 = 2

Persons at risk: User

2.61 Structural steel demolition

2.61.1 Task: Structural steel demolition

Hazard	Risk	Control measures	RR
Serious injuries sustained from uncontrolled falling of loads	3 x 5 = 15	All lifting and lowering operations are to strictly conform to LOLER regulations 1998 Any demolition is to follow a pre-prepared demolition plan that is structured strictly around the health and safety of operatives Any changes to the hazards onsite during demolition should be recorded, work suspended and a new safe method of work employed by the site supervisor Lifting and lowering operations are to have correct documentation submitted including test certificates, qualifications, lift plan etc.	1 x 5 = 5
Persons at risk: All site operatives			
Serious injuries sustained from using unsafe or incorrect lowering equipment	4 x 5 = 20	All lifting and lowering equipment is to have a current test certificate where valid Be inspected prior to each and every use by the user The safe working loads shall not be exceeded under any circumstances	1 x 5 = 5
Persons at risk: All site operatives			
Injuries to unauthorised personnel gaining access to demolition area	3 x 5 = 15	All site operatives not be allowed under a suspended load Only use trained competent personnel for lifting and lowering duties and one man to control lifting operation The use of a subcontracted work force should be minimised where possible to ensure efficient knowledge of safe method of working Areas shall be fenced off, signage applied to all lifting areas, and use banksman for to warn any third parties No unauthorised personnel shall be allowed into or near the lifting or lowering areas All personnel to involved in lifting or lowering operations to read and understand demolition plan with site supervisor	1 x 5 = 5
Persons at risk: All site operatives & public			

2.62 Installation of Metsec SFS

2.62.1 Task: Fitting of cladding panels

Hazard	Risk	Control measures	RR
Falls from height causing possible death whilst installing cladding panels	4 x 5 = 20	All operatives to be made aware of the risks and hazards associated with working at height and to be instructed in the contents of the method statement and safe system works, any changes will be communicated to site staff immediately with work stopping until all staff are made aware Ensure adequate supervision is provided and that control measures remain valid for the duration of the work Plan works to take account of weather conditions and now works shall be permitted during periods of adverse weather such as in strong winds or wet weather A safe system of access and egress to the working area shall be provided in the form of a full access scaffold Access scaffolds are to be provided with toe boards, double guard rails and ladder access	1 x 5 = 5
Persons at risk: User			
Injuries to hands or body from exposed nails	4 x 3 = 12	All operatives to be provided with appropriate PPE and trained in its use and application	1 x 3 = 3
Persons at risk: User			
Serious or fatal njuries from falling materials/tools to those passing underneath or near works	4 x 5 = 20	Warning signs shall be erected stating “men working overhead” The working area shall provide protection from and to pedestrians and other persons who may be in the vicinity of the works Access scaffolds are to be provided with toe boards, double guard rails and ladder access ?Other features such as a gin wheel and debris chute shall be incorporated into the scaffold design where applicable No materials or debris shall be allowed to be thrown (or bombed) from the scaffold or roof area Rubble netting, brick guards and fans shall be considered to provide protection to persons below where applicable	1 x 1 = 1

Persons at risk: All site operatives & public

2.63 Working with lead

2.63.1 Task: Working with lead

Hazard	Risk	Control measures	RR
Serious health risk through inhaling lead dust, fumes, vapour or ingestion	4 x 3 = 12	Before undertaking any work, supervisor to assess whether risk is significant so he can then provide additional control measures if needed Ensure all staff have been trained in the safe use of lead, understanding risks of ingestion or inhalation together with operating machinery/machinery safely Make sure operatives are trained for any emergencies when working with lead like a sudden uncontrolled release of lead dust or fume All PPE equipment provided should fit correctly and be in good condition, and return it at the end of the shift/day to the proper place provided by your employer Any damaged or defective equipment to be reported and replaced immediately by employer Washing & changing facilities will be provided by client for staff, where all operatives will practice a high standard of personal hygiene including washing hands, face and scrubbing nails The above good hygiene principals will be undertaken before drinking, eating or smoking A welfare area free from lead contamination where staff can eat and drink safely will be provided by client Keep immediate work area as clean and tidy as possible; clearing up any lead waste at the end of each day or shift Fume and or dust extraction will be implemented to prevent or control exposure to lead for site operatives and all equipment will be kept in efficient working order Once works complete, operatives should wash or shower before leaving work and not take home any protective clothing or footwear for washing or cleaning	1 x 3 = 3

Persons at risk: User

2.63.1 Task: Working in areas with 'significant' exposure to lead

Hazard	Risk	Control measures	RR
Working in any areas deemed to cause 'significant' exposure to lead causing potentially serious health effects	4 x 4 = 16	All operatives will be trained in the safe handling and working with lead in environments of 'significant' exposure Operatives will be provided with protective clothing & PPE by employer, with training in the safe use of such equipment included Employer will measure the level of lead in the air and let all site operatives know the results of tests and how this would effect your health If exposure to lead cannot be kept below occupation exposure limit, the employer will provide you with respiratory protective equipment Any 'significant' exposure areas where risk to inhalation of ingestion by public will include a more detailed control plan to ensure public exposure to lead is eliminated i.e. using industrial ventilation or extraction units Site supervisor will make arrangements for laundering contaminated clothing A doctor will visit the workplace every 3 months or sooner to measure the level of lead in all operatives blood and each operative will be informed of their respective results If a doctor proves any operatives blood-lead level reaches the suspension level, the doctor will repeat the test and if this still confirms the result of the first test, operative(s) should not carry on working with lead	1 x 4 = 4

Persons at risk: User

2.64 General masonry works

2.64.1 Task: General masonry works

Hazard	Risk	Control measures	RR
Serious head and other injuries to workers, others on site and members of the public	4 x 5 = 20	Plan stacking area and stack bricks neatly Brick guards kept in position on scaffold lifts Do not overload scaffolding Waste materials removed from scaffolding and placed in skip Safety helmets and protective footwear supplied and worn at all times	1 x 5 = 5
Persons at risk: All site operatives & public			
Injuries sustained from operatives regularly lifting or carrying heavy or awkward objects such as a load of bricks	5 x 3 = 15	Refer to C.I.T.B. manual for safe install of masonry blocks or bricks Palletised bricks to be kept in planned stacking area Palletised bricks to be staked no higher than 2 metres Moving of palleted bricks by forklift only to be operated by a competent person Bricks, blocks, mortar etc to be transported and lifted to scaffold using telehandler or other mechanical goods lift Trolley to be used for moving loads of bricks around the scaffold	1 x 3 = 3
Persons at risk: User			
Skin disease such as dermatitis after having direct skin contact with the mortar	4 x 3 = 12	Risk of dermatitis or cement burns explained to all operatives Use cement or cement containing products within the use-by date Direct skin contact to be avoided, CE marked PVC gloves used when handling mortar Check welfare facilities, ensure good washing facilities on site, with hot and cold water, soap and basins large enough to wash forearms First aid should be checked to ensure eye wash is included in site kit	1 x 3 = 3
Persons at risk: User			

Inhalation and exposure to dust could cause silicosis and lung damage	4 x 3 = 12	Angle grinders replaced with block splitter, removing the risk of significant dust exposure Minimise the need to use grinder for chasing etc	1 x 3 = 3
Persons at risk: User			

2.65 Installation of roof trusses

2.65.1 **Task:** Installation of roof trusses

Hazard	Risk	Control measures	RR
Serious or fatal injuries sustained from falls, loss of footing or collapse of structure	5 x 5 = 25	Weather conditions (in particular wind speed) to be acceptable for truss installation work Joists and stair opening at first floor level to be fully boarded Scaffolding lift to be a convenient height for both safety and access into trusses - ‘Hop up’ may be needed Wall plate must be of sufficient height above working platform to offer edge protection when lifting trusses into position on the wall plate (950mm) Where possible roof trusses to be assembled on the ground and lifted into position as a completed roof unit Otherwise trusses to be lifted onto scaffold by mechanical means or with enough persons to ensure safety Sufficient temporary boards to be in position so joiners can easily position and secure them within the trusses Trusses not to be left in temporary un-secured state. Trusses must be secured and braced before being left	1 x 5 = 5
Persons at risk: All site operatives			

2.66 Installing timber joists

2.66.1 Task: Installing timber joists

Hazard	Risk	Control measures	RR
Serious or fatal injuries sustained from falls or collapse of structure	4 x 5 = 20	Only trained and experienced joiners to undertake work, If inexperienced they are to work under the direct supervision of an experienced worker at all times Fall protection should be positioned at the earliest possible opportunity and prior to joists being positioned Wall plate must be of sufficient height above working platform to offer edge protection when lifting trusses into position on the wall plate (950mm) Access will be provided in the form of protected working platforms, joiners will not walk on wall heads as means of access Joists are to be handled by sufficient people to maintain stability as well as manual handling hazards Joist to be adequately braced or chocked to prevent rolling or moving Joists must not be loaded until they are permanently braced and fixed If access is required onto the joists, they must be adequately fixed and boarded to provide safe access and safe working platform, including edge protection All temporary access onto the joists must be removed from the plot when the plot is left unattended	1 x 5 = 5

Persons at risk: All site operatives

2.67 Working with clay roof tiles

2.67.1 Task: Moving clay tiles around roof to load out

Hazard	Risk	Control measures	RR
Sharp Edges cutting hands and weight of tile packs causing manual handling injuries	3 x 3 = 9	Ensure gloves are worn Ensure clay tiles are mechanically loaded as near to work point as possible Ensure either safety netting or air bags are placed in the void below the work area	1 x 3 = 3

Persons at risk: User

2.67.1 Task: Cutting clay tiles

Hazard	Risk	Control measures	RR
Breathing in of dust created whilst cutting, hand and eye injuries from abrasive wheels and dust contamination of clothes	3 x 2 = 6	Ensure cutting is carried out in a well ventilated area Wear a dust mask if prolonged cutting is to be carried out or working on a poorly ventilated area Ensure goggles are worn when using abrasive wheels Ensure operatives have had abrasive wheel training Ensure disposable coveralls are worn	1 x 2 = 2

Persons at risk: User

2.68 Asphalt heating and transportation

2.68.1 Task: Asphalt heating and transportation

Hazard	Risk	Control measures	RR
Burns to employees and other site personnel	4 x 3 = 12	PPE Requirements: Hand / arm protection to BSEN511, Face shield to BSEN 1663B, Work wear to BSEN531, safety footwear All employees carrying out the heating and transporting of liquid asphalt to be specifically trained in these works. Only competent and authorised personnel to carry out this activity The area for heating to be cordoned off by barriers and warning signs to be in place All boilers and burner stands MUST be fitted with high pressure armoured gas hose (i.e. with an exterior braid or metal spiral) with a minimum length of 4 metres Cylinders must be a minimum of 10' from boiler in the open air and away from any heat source and upwind of the boiler. They should be positioned so that any spill of bitumen will run AWAY from the cylinder. Make sure that the cylinder is large enough for your requirements Fire extinguishers, a bucket of sand, first aid and safety equipment should be in easy reach and accessible at the work area and heating area at all times Purpose made buckets only to be used to transport liquid asphalt Buckets only to be filled to a maximum of ¾ full Area below lifting operation to be clear of all personnel excluding specifically trained banksman Observe good housekeeping and lifting techniques at all times Never leave unattended at any time	1 x 3 = 3

Persons at risk: All site operatives

2.69 Using floor sander

2.69.1 Task: Using floor sander

Hazard	Risk	Control measures	RR
Lacerations from contact with machine rotary sanding board	2 x 4 = 8	Machine is only to be used by experienced operatives with safety instructions provided before use Areas of work to be sectioned off with physical barrier to protect other workers and public Warning Signage to be displayed while working Isolate and disconnect power before conducting any maintenance / adjustments or when not in use Use only genuine parts and ensure disc is in good condition before commencing work Supervisor to monitor and review safe use	1 x 4 = 4
Persons at risk: All site operatives			
Respiratory problems from exposure to dust generated during cut	2 x 3 = 6	Monitor and review safe use, Dust Mask P3 EN 149: 2001 + A1: 2009 to be worn Dust levels generated are minimal, all dust and debris cleaned up regularly	1 x 3 = 3
Persons at risk: All site operatives			
Hand / Arm vibration syndrome	2 x 4 = 8	Tool use restricted to a maximum of 2 hours per day Operatives advised to report any adverse symptoms immediately Monitor exposure Establish health surveillance programme	1 x 4 = 4
Persons at risk: User			
Noise induced hearing loss, exposure levels 80 dB	3 x 4 = 12	Hearing protection to be used by operatives and others in the immediate vicinity whilst tool is in use Monitor and review safe use onsite Establish health surveillance programme	1 x 4 = 4
Persons at risk: User			

Fire / Explosion / Burns / Electrocution	2 x 5 = 10	Tool is 110v All power tools, leads and cables subject to periodic PAT testing Any dust generated is cleaned up regularly No smoking / No naked flames Monitor and review safe use	1 x 5 = 5

Persons at risk: All site operatives

2.70 Charging or decanting synthetic refrigerant

2.70.1 Task: Charging or decanting synthetic refrigerant

Hazard	Risk	Control measures	RR
Serious injuries sustained from the transporting of refrigerant or explosion	3 x 5 = 15	Use mechanical handling equipment for cylinders where possible Labels prominently displayed to state refrigerant in system and warning against charging any other gas into system Handle refrigerant in accordance with COSHH Assessment sheet Cylinders to be clearly identified and stored in a separate area Remove cylinders from heat source and always keep cylinders in a cool space Waste refrigerants should be disposed of through registered waste operators only and obtain waste transfer notes Recovered refrigerant should not be transported	1 x 5 = 5
Persons at risk: All site operatives & public			
Synthetic refrigerant coming into contact with skin causing freeze and chemical burns	5 x 3 = 15	Only competent and trained engineers shall undertake any charging or decanting of refrigerant Engineers will never work alone when charging or decanting refrigerant and supervising partner shall be versed in emergency procedures Always wear correct PPE as specified in attached method statement COSHH statements for refrigeration should be read before beginning the operation	1 x 3 = 3
Persons at risk: User			
Asphyxiation due to gases escaping to atmosphere	4 x 5 = 20	Any operatives working on equipment designed, or contain F-Gas refrigerants will have an F-Gas Company Certificate and follow legislation accordingly Always use correct tools and equipment for the purpose of charging / re-charging Refrigerants are asphyxiates and can accumulate particularly in low lying areas such as pits, below ground plant rooms, sealed stairwells, beer cellars, etc., therefor ensure adequate levels of ventilation particularly at low lying areas The engineer should strictly control access to the area	1 x 5 = 5

Persons at risk: All site operatives

2.71 Condenser installation

2.71.1 Task: Condenser outdoor installation

Hazard	Risk	Control measures	RR
Injuries to hands and back due to lifting, and working on outdoor condensor units	5 x 3 = 15	Ensure a competent person is responsible for the installation of the outdoor unit and location has been agreed with principal contractor or client Operative to review manual handling method statement before lifting any heavy or bulky items, the use of mechanical lifting assistants should be used for any load that is awkward or weighs more than 25kg Refer to manufacturers specification for fixing of condenser unit before undertaking works	1 x 3 = 3

Persons at risk: User

2.72 Testing pressure systems

2.72.1 Task: Testing pressure systems

Hazard	Risk	Control measures	RR
Serious injury caused by brittle failures, missile generation or failure under pressurisation	4 x 5 = 20	Secure test area - ensure site supervisor is informed, any permit to work systems in place, and warning notices visible to others likely to enter test area Floor area to be cleared before test to reduce trip hazards in case of emergency PPE (goggles) to be worn Ensure all end caps are secure prior to test commencement A hose should be connected to drain valve throughout test in case of emergency Container to be on hand in case of water leaks Any spillages to be cleaned up immediately and warning notices in place if area remains slippery Complete air test first to check for leaks Once air test complete, pressurisation to proceed in a slow, controlled and procedural manner Site operative to monitor pipe work throughout pressure test	1 x 5 = 5

Persons at risk: All site operatives

2.73 Thermal & acoustic insulation to pipework

2.73.1 Task: Thermal & acoustic insulation

Hazard	Risk	Control measures	RR
Lung damage caused by inhalation of fumes and skin & eye damage from adhesives, welding agents, or fibre from insulation	4 x 2 = 8	Operative to wear safety goggles, safety masks Cutting and welding of insulation to be minimised where possible All insulation works shall be undertaken in a well ventilated area	1 x 2 = 2

Persons at risk: User

2.74 Charging or decanting ammonia refrigerant

2.74.1 Task: Charging or decanting of ammonia refrigerant

Hazard	Risk	Control measures	RR
Serious injuries sustained from the transporting of refrigerant or explosion	4 x 5 = 20	Use mechanical handling equipment for cylinders where possible Labels prominently displayed to state refrigerant in system and warning against charging any other gas into system Handle refrigerant in accordance with COSHH assessment sheet Cylinders to be clearly identified and stored in a separate area Remove cylinders from heat source, keep cylinders cool Waste refrigerant should be disposed of through registered waste operators only and obtain waste transfer notes Recovered refrigerant should not be transported	1 x 5 = 5
Persons at risk: All site operatives			
Severe lung and environmental damage due to gases escaping to atmosphere	5 x 3 = 15	Any operatives working on equipment designed, or contain F-Gas refrigerants will have an F-Gas Company Certificate and follow legislation accordingly Always use correct tools and equipment for the purpose of charging/re-charging The area should be checked before starting any operating for correct amount of ventilation is present The engineer should strictly control access to the area Do not trap liquid ammonia between valves	1 x 3 = 3
Persons at risk: All site operatives & public			

Ammonia coming into contact with skin causing freeze and chemical burns	5 x 3 = 15	Only a competent and trained engineer in possession of city and guilds 2077 or 2078 certificate shall undertake any charging or decanting of ammonia refrigerant Engineers will never work alone when charging or decanting ammonia refrigerant and supervising partner shall be versed in emergency procedures Check that a supply of water of drench water is immediately available for dilution of ammonia if splashes skin, eyes or clothing Always wear correct PPE as specified in attached method statement COSHH statements for ammonia should be read before beginning the operation Ensure disconnecting of hoses slowly incase liquid remains in the hose	1 x 3 = 3		
Persons at risk: User					

2.75 Repairs to manholes and live drains

2.75.1 Task: Repairs to manholes and live drains

Hazard	Risk	Control measures	RR
Infectious diseases to workers or public from contaminated drains	4 x 4 = 16	Operatives to ensure personal hygiene is kept to a high standard Site supervisor to ensure barrier creams and skin cleansing products available Correct PPE should be provided and may included disposable/ protective coveralls, rubber gloves, rubber boots All disposable coveralls to be bagged onsite and disposed of once works complete Inoculation program is to be made available to all operatives identified 'at risk'	1 x 4 = 4
Persons at risk: User			
Injuries sustained to workers or public from exposed manholes	4 x 3 = 12	Any requirements for man hole to be removed is to be co-ordinated with the site supervisor Refer to the special permit procedure in method statement if working in confined space permit is required Area of concern to be cordoned off with barriers Only remove man hole cover whilst working in man hole	1 x 3 = 3
Persons at risk: All site operatives & public			

2.76 Copper pipework installation

2.76.1 Task: Copper pipework installation

Hazard	Risk	Control measures	RR
Lung damage caused by inhalation of fumes (which may contain cadmium) and skin & eye damage from sealants	3 x 3 = 9	All substances required to perform plumbing activities are identified i.e., lead, solder, plumber flux etc. and the relevant COSHH Assessments and personal protective equipment is made available Consider use of respiratory equipment in confined areas Avoid skin contact with sealants and wash from skin as soon as possible All areas must be kept very well ventilated during sealant works and minimum requirement is to open all doors and windows	1 x 3 = 3
Persons at risk: User			
Serious injuries sustained from fire or explosions whilst using a blowtorch or similar for brazing/bronze welding (oxy-ccetylene & oxy-propane)	4 x 5 = 20	A hot work permit system should be implemented onsite by the principal contractor or client Site operatives must comply with safe procedures and manufacturers instructions whilst undertaking hot works Only suitably trained and competent personnel are permitted to carry out hot works User must ensure all combustible materials are removed, with flammable liquids and gas cylinders beyond the range of the blowtorch When using a blowtorch on metal surfaces, combustible material in contact with the metal behind or adjacent to the work area should be removed before work commences Keep a watch whilst work is in progress for signs of fire or smouldering in the immediate vicinity Ensure a portable fire extinguisher is readily available wherever and whenever hot works are in progress Always extinguish a blowtorch when not in use and never leave it burning unattended Ensure adequate ventilation where gas burning appliances are in use Ensure area is checked thoroughly at the end of the work period and signed off on hot works permit as being safe by site supervisor and user	1 x 5 = 5

Persons at risk: All site operatives			

2.77 Ductwork installation

2.77.1 **Task:** Ductwork installation

Hazard	Risk	Control measures	RR
Injuries or cuts to hands from general fixing and assembly of ductwork	4 x 2 = 8	Wear gloves or long sleeves when working through the ceiling grid to prevent cuts and grazes to hands Refer to manual handling risk assessment for any heavy or bulky items that need to be lifted into place	1 x 2 = 2
Persons at risk: User			
Lung damage caused by inhalation of fumes and skin & eye damage from sealants	4 x 2 = 8	All substances required to perform ductwork activities are identified i.e.,solder, sealants etc. and the relevant COSHH Assessments and personal protective equipment is made available Avoid skin contact with sealants and wash from skin as soon as possible All areas must be kept very well ventilated during sealant works and minimum requirement is to open all doors and windows Consider use of respiratory equipment in confined areas	1 x 2 = 2
Persons at risk: User			

2.78 General plumbing works

2.78.1 Task: General plumbing

Hazard	Risk	Control measures	RR
Lung damage caused by inhalation of fumes and skin & eye damage from sealants	3 x 3 = 9	All substances required to perform plumbing activities are identified i.e., lead, solder, plumber flux etc. and the relevant COSHH Assessments and personal protective equipment is made available Consider use of respiratory equipment in confined areas Avoid skin contact with sealants and wash from skin as soon as possible if skin contact occurs All areas must be kept very well ventilated during sealant works and minimum requirement is to open all doors and windows	1 x 3 = 3
Persons at risk: User			
Slips, trips and falls	4 x 2 = 8	Ensure all live pipework is isolated before undertaking any work to ensure no leakage See slips trips and falls risk assessment	1 x 2 = 2
Persons at risk: All site operatives			

2.79 Fan coil unit works

2.79.1 **Task:** Manoeuvring and installing fan coil unit into place

Hazard	Risk	Control measures	RR
Musculoskeletal injuries when installing unit and securing it into place	4 x 3 = 12	Operatives to review manual handling method statement before lifting any heavy or bulky items The use of mechanical lifting assistants should be used for any load that is awkward or weighs more than 25kg Where mechanical aid not feasible, management must ensure sufficient manpower resources are allocated for the safe lifting and position of fan coil unit Refer to manufacturers specification for fixing of condenser unit before undertaking works	1 x 3 = 3
Persons at risk: User			
Unit or materials falling from height onto engineer or other site operatives	4 x 4 = 16	Ensure trained operatives are employed in the safe lifting and securing of fan coil unit Ensure area is cordoned off before undertaking any works, and engineers are working from safe working platforms like podium steps or access tower Ensure manufacturer's instructions are followed when fastening hangers to soffit and can carry select loads. If unsure consult site supervisor or nominated structural engineer Use a mechanical handling aid (i.e. genie lift) when positioning & securing fan coil unit into place, ensure unit is securely fastened before removing handling aid If positioning unit without handling aid, ensure workers are not positioned below unit and are in a location where they can safely undertake works without strain	1 x 4 = 4
Persons at risk: All site operatives			

2.80 Drilling into Artex textured surface

2.80.1 Task: Preparing to drill into Artex

Hazard	Risk	Control measures	RR
Inhalation of harmful dust, if pre 1980's potentially containing asbestos	3 x 5 = 15	Work on textured coatings will be carried out by non-licensed workers who are appropriately trained Area to be covered with plastic sheets secured with tape to help catch waste Wear a disposable, correctly fitted FFP3 face mask and Type 5 disposable overalls Wear the overalls one size too big and put the legs over the top of footwear Do not re-use disposable overalls and masks	1 x 5 = 5

Persons at risk: User

2.80.1 Task: Drilling into Artex

Hazard	Risk	Control measures	RR
Inhalation of harmful dust, if pre 1980's potentially containing asbestos	3 x 5 = 15	Put a blob of wallpaper paste or shaving foam on the place where you are going to drill Drill through the paste/foam If you are running cables through the hole, make it large enough so that the cables pass through easily Use a damp cloth to wipe off the paste/foam Wipe the side where the drill comes out if you can reach it and also wipe the drill bit Put the used cloth in a plastic sack Put sealant around the hole Use a manual drill if possible, otherwise set your power drill to the slowest speed	1 x 5 = 5

Persons at risk: User

2.80.1 Task: Post Artex drilling

Hazard	Risk	Control measures	RR
Inhalation of harmful dust, if pre 1980's potentially containing asbestos after works complete	3 x 5 = 15	Use a damp cloth or Class H vacuum cleaner with a special filter to clean up Do not use a domestic vacuum cleaner or a brush as these will spread asbestos fibres into the air Double bag all waste including masks, overalls, cloths and plastic sheets in plastic sacks, seal with tape and label as asbestos waste Contact the local tips in your area to find one that accepts asbestos waste	1 x 5 = 5

Persons at risk: All site operatives & public

2.81 Air handling unit works

2.81.1 Task: Manoeuvring and installing air handling unit into place

Hazard	Risk	Control measures	RR
Musculoskeletal injuries when installing unit and securing it into place	4 x 3 = 12	Operatives to review manual handling method statement before lifting any heavy or bulky items The use of mechanical lifting assistants should be used for any load that is awkward or weighs more than 25kg Where mechanical aid not feasible, management must ensure sufficient manpower resources are allocated for the safe lifting and position of air handling unit Refer to manufacturer's specification for fixing air handling unit into place	1 x 3 = 3
Persons at risk: All site operatives			
Unit or materials falling from height onto engineer or other site operatives	3 x 5 = 15	Ensure trained operatives are employed in the safe lifting and securing of air handling unit following LOLER regulations where lifting undertaken Ensure area is cordoned off before undertaking any works, and engineers are working from safe working platforms like fixed scaffolding or access tower Ensure manufacturer's instructions are followed when installing air handling unit on base structure. If unsure, consult site supervisor or nominated structural engineer If AHU being craned into position, ensure operatives follow the separate cranage risk assessment from specialist contractor and LOLER regulations are followed at all times. Employees who are not trained will strictly not be admitted into cordoned lifting space. Site supervisor will be present throughout the lift	1 x 5 = 5
Persons at risk: All site operatives			

2.82 Electrical testing and commissioning

2.82.1 Task: Testing and commissioning

Hazard	Risk	Control measures	RR
Serious or fatal burns and injuries sustained from electric shock testing 'decommissioned' equipment	5 x 5 = 25	Ensure equipment dead by a competent testing electrician and locked off When testing equipment, where possible test dead, if not possible look at energising to a safe current Review environment in direct vicinity of testing and commissioning If you're testing on live equipment, operative should review risk assessment for live testing	1 x 5 = 5
Persons at risk: User			
Serious or fatal burns and injuries from electric shock testing live equipment	5 x 5 = 25	Only test engineers are permitted to carry out testing of live equipment as part of their duties Review the area and determine if a separate test area can be created where equipment can be taken for testing Where possible employ residual current devices (RCDs) to provide supplementary protection Physical safeguards should be applied to the equipment under test to prevent injury, e.g. the use of temporary or permanent screens, barriers, and insulating mats Use isolating transformers at the source of supply to mains-powered test equipment if possible if undertaking hardware precautions Where risk of arc flash exists adequate calorific value PPE will be employed and only all insulated tools may be used which have been properly maintained If using a test bench, place all test equipment on an insulated shelf immediately above the test bench All test and shorting leads are to be fused Where there is risk of touching live parts insulated gloves will be worn A second person is to be in attendance in case of accident	1 x 5 = 5
Persons at risk: User			

2.83 Removal of existing electrical services

2.83.1 **Task:** Removal of existing electrical services

Hazard	Risk	Control measures	RR
Falls from height during strip out or removal of services	5 x 4 = 20	Follow working from height risk assessment when striping out fixtures, fittings and services from above When pulling cables at height be sure to employ safe system of work including having another operative to assist with cable pulling	1 x 4 = 4
Persons at risk: User			
Contact with live electricity causing serious or fatal injuries	5 x 5 = 25	Follow electrical isolations risk assessment Employ safe system of work with site supervisor	1 x 5 = 5
Persons at risk: All site operatives			

2.84 Electrical work up to 400 volts

2.84.1 Task: Electrical work up to 400 volts

Hazard	Risk	Control measures	RR
Serious or fatal burns and injuries from electric shock	5 x 5 = 25	Working on or near live equipment should not be undertaken unless completely necessary and deemed as such by principal contractor or representative A safe system of work should be recorded when 'live' work is necessary and should only be undertaken by a trained and competent electrician If coordinating work where more than one group is involved, the necessary precautions and emergency procedures will be discussed with all operatives Roles and responsibilities of the supervisors and workers, including those of any contractors who may be employed will be clearly defined before undertaking any work Any supervisors shall be competent to supervise the work, with the level of supervision being appropriate to the danger and the competence of those carrying out the work Sufficient lighting and working space shall be allowed for before undertaking any work A competent electrician should follow the electrical isolations risk assessment Only a competent electrician can work on electrical services up to 400 volts, unauthorised, unqualified or untrained people work are not allowed to work on any electrical services Any live working shall be undertaken with a partner who will be able to assist in an emergency Correct PPE shall be worn at all times	1 x 5 = 5

Persons at risk: All site operatives

2.85 PAT testing of appliances or tools

2.85.1 Task: PAT testing of appliances or tools

Hazard	Risk	Control measures	RR
Electric shock from coming into contact with an appliance or tool whilst undertaking PAT testing	4 x 5 = 20	Ensure all appliances are isolated or unplugged, and make sure immediate vicinity of electrical equipment is safe Look and remove any dangers that exist such as moisture, combustible dust, or members of the public less than 2 metres away Undertake visual inspection ensuring there is no damage to casing or flex, ingress of liquids or dust Avoid handling parts of the equipment that may move, turn or become hot or electrically charged while testing Only use new or well maintained testing equipment and insulated tools Ensure all testing and labelling is undertaken by a qualified electrician Remove any tools from site that are deemed to provide a danger to users	1 x 5 = 5

Persons at risk: User

2.86 Installing new distribution board

2.86.1 **Task:** Installing new distribution board

Hazard	Risk	Control measures	RR
Contact with live electricity causing serious or fatal injuries	5 x 5 = 25	Follow electrical isolations risk assessment Ensure permit to work system implemented Competent person employed to undertake any works on or near distribution board Complete all testing as per the requirements of BS7671 ensuring that all dead tests are carried out prior to energising	1 x 5 = 5
Persons at risk: User			
Cuts to hands or limbs during mounting of new distribution board	3 x 2 = 6	Follow the using portable tools or equipment risk assessment Follow manual handling risk assessment when lifting and mounting new distribution board into position	1 x 2 = 2
Persons at risk: User			

2.87 Installing new lighting

2.87.1 Task: Installing new lighting

Hazard	Risk	Control measures	RR
Contact with live electricity causing serious or fatal injuries	4 x 5 = 20	Trained operative to follow electrical isolations risk assessment Follow manual handling risk assessment when lifting and mounting new light fixtures into position	1 x 5 = 5
Persons at risk: User			
Falls from height during lighting installation	4 x 3 = 12	Follow working from height risk assessment specific to access equipment being used When pulling cables at height be sure to employ safe system of work including having another operative to assist with cable pulling and cable mounting	1 x 3 = 3
Persons at risk: User			
Injuries to head from falling objects	4 x 3 = 12	Always ensure items waiting to be installed to high level are secured on a stable platform or lifted into place using a manual handling equipment Ensure correct safety measures in place to ensure tools or equipment do not fall from fixed or mobile platforms Correct PPE to be worn by all site operatives	1 x 3 = 3
Persons at risk: All site operatives			

2.88 Electrical isolations

2.88.1 Task: Electrical Isolations

Hazard	Risk	Control measures	RR
Contact with live electricity causing serious or fatal injuries	4 x 5 = 20	Ensure a safe system of work has been implemented with principal contractor or representative Equipment is to be checked with a compliant tester, insulated hand tools and competent electrician prior to commencing works and approved by site supervisor Switch off installation/circuit to be isolated, verify with voltage indicating device that no voltage is present and reconfirm again Ensure all electrical equipment is made dead and locked off by a competent electrician and retain the keys Provide warning notices and double check circuit or equipment is dead Apply circuit main earth(s) where necessary and take precautions against adjacent live parts where necessary Issue a permit to work and apply local earth(s) where necessary Continual vigilance and monitoring of circuits to be undertaken by competent electrician or a designated site representative	1 x 5 = 5

Persons at risk: User

2.89 Installation of cabling

2.89.1 Task: Installation of cabling

Hazard	Risk	Control measures	RR
Cuts, abrasions and possible injury to eyes during cable install and termination works	3 x 2 = 6	Ensure operatives are wearing correct PPE, including gloves, hi-vis jackets, hard hats, safety glasses and boots Cable ends are covered or taped before final termination to minimise cuts Ensure all operatives are competent, and trained to strip/cut cabling to minimise flying debris and cuts	1 x 2 = 2
Persons at risk: User			
Contact with live electricity causing serious or fatal injuries	3 x 3 = 9	Site management to ensure all power has been terminated in areas of work Any isolations should be undertaken by a competent operative who will need to follow the electrical isolations risk assessment before undertaking any work	1 x 3 = 3
Persons at risk: User			

2.89.1 Task: Installation of cabling at height

Hazard	Risk	Control measures	RR
Falls from height during cable installation	4 x 3 = 12	Follow working from height risk assessment specific to access equipment being used When installing cable at height be sure to employ safe system of work including having another operative to assist with cable pulling and cable mounting	1 x 3 = 3
Persons at risk: User			

2.90 Pipe threading / grooving machines

2.90.1 Task: Operating pipe threading / grooving machine

Hazard	Risk	Control measures	RR
Clothing entanglement with moving parts causing serious injury or amputation	3 x 5 = 15	Only trained operatives may undertake work Select area for machine with minimum pedestrian access OBJ OBJ OBJ OBJ Provide adequate lighting in work area Guards will be fitted to the rotating parts, and end guards around rotating pipe ends, unless the machine is positioned so that no person can approach a rotating pipe end Replace any damaged parts or guards before starting work Operators are not to wear loose clothing or gloves, or use rags or other materials which could become entangled with moving parts	1 x 5 = 5
Persons at risk: All site operatives			
Skin damage to operative from coming into contact with hazardous substances	4 x 3 = 12	OBJ Provision of correct gloves and PPE will be provided COSHH assessments must be available for any lubricating or cutting fluids on machines Operators will also be made aware of any hazards and controls required by relevant COSHH assessments	1 x 3 = 3
Persons at risk: User			
Slips, trips or falls whilst operating machinery	4 x 3 = 12	Good housekeeping to be undertaken at all times Oil spillage from pipe threading machine to be prevented and collected Safe collection of swarf to be undertaken as necessary Keep Power leads clear of work area Disconnect from power source when left unattended for long periods or when in any area open to access by members of the public General slips, trips and falls risk assessment to be read in conjunction with the above	1 x 3 = 3
Persons at risk: All site operatives & public			

2.91 Gas fittings and fixtures works

2.91.1 Task: Gas fittings and fixtures works

Hazard	Risk	Control measures	RR
Injuries or death sustained from the inhalation or explosions of ignition sensitive gasses	4 x 5 = 20	A responsible person, eg a principal contractor, foreman, site manager or other person with overall control of the work, is nominated to ensure safe method of work is undertaken Any person who disconnects a gas fitting shall, with the appropriate fitting, seal off every outlet of every pipe to which it was connected Any work related to installing or changing gas fixtures or fittings are not to be undertake until shown that all gasses have been prevented from release No person carrying out work in relation to a gas fitting shall leave the fitting unattended unless every incomplete gasway has been sealed with the appropriate fitting or the gas fitting is otherwise safe Any work in relation to a gas fitting which might affect the gas tightness of the gas installation shall test the installation as far as the nearest valves upstream and downstream in the installation Any person installing a gas fitting shall ensure that it is properly supported and placed or protected as to avoid any undue risk of damage to the fitting No person shall install a gas fitting if he has reason to suspect that foreign matter may block or otherwise interfere with the safe operation of the fitting No person shall install a gas fitting in a position where it is likely to be exposed to any substance which may corrode gas fittings	1 x 5 = 5

Persons at risk: User

2.92 Testing and commissioning fire alarm system in occupied space

2.92.1 **Task:** Testing and commissioning fire alarm system in occupied space

Hazard	Risk	Control measures	RR
Injuries caused to building occupants or site staff when escaping under a live fire alarm during testing and commissioning	4 x 1 = 4	Ensure all fire alarm tests are co-ordinated with the client or site management and all fire marshals are made aware on day of testing If possible only undertake fire alarm tests in each local area at a time to minimise disruption to occupants or site staff	1 x 1 = 1
Persons at risk: All site operatives & public			

2.93 General plastering / tape & jointing works

2.93.1 **Task:** General plastering / tape & jointing works

Hazard	Risk	Control measures	RR
Lung damage caused through sanding down surfaces	4 x 2 = 8	All site operatives to be educated on the risks of dry plaster powder and know to avoid skin contact, excessive dust build-up and contact with eyes User to wear eye protection when plastering ceilings Users to ensure work area is kept clean and tidy If using powered sanding machines, ensure dust collection system present If sanding by hand, operatives must wear dust masks to prevent inhalation	1 x 2 = 2
Persons at risk: User			
Lung damage or difficulties breathing from mixing and sanding powdered fillers	3 x 2 = 6	Dust masks should be worn when mixing up filler solution Ensure filler solution is mixed in a well ventilated and nominated area by site supervisor If using powered sanding machines, ensure dust collection system present	1 x 2 = 2
Persons at risk: User			

2.94 Preparing surfaces for decorations

2.94.1 Task: Preparing surfaces for decorations

Hazard	Risk	Control measures	RR
Lung damage or difficulty breathing from mixing and sanding powdered fillers	3 x 2 = 6	Wear dusk mask when mixing up filler solution Ensure filler solution is mixed in a well ventilated and nominated area by site supervisor	1 x 2 = 2
Persons at risk: User			
Cuts to hands from preparing surfaces	4 x 2 = 8	Wear gloves when cleaning surface Cover cuts and open wounds with onsite first aid supplies, all accidents to be reported to site supervisor Wash and wipe hands before eating, drinking, smoking and after shift	1 x 1 = 1
Persons at risk: User			
Lung damage or difficulty breating from the use of chemical paint strippers	4 x 2 = 8	Wear overalls, gloves eye protection and mask when using chemical paint strippers Wash hands before coming into contact with any food Review COSHH statement if checmical strippers used No naked flames allowed in vicinity	1 x 2 = 2
Persons at risk: User			
Lung damage or difficulty breathing caused by sanding and making good old work	3 x 2 = 6	If using powered sanding machines, ensure dust collection system present Be sure to check if before preparing if old paint had been used containing lead of old paints that may contain lead If sanding by hand, operatives must wear dust masks to prevent inhalation and check method statement for selected PPE	1 x 2 = 2
Persons at risk: User			

2.95 Suspended ceiling works

2.95.1 Task: Working at height installing/removing suspended grid and ceiling

Hazard	Risk	Control measures	RR
Injuries sustained from falling from height or the dropping of materials from height	4 x 4 = 16	Provide safe system of work, and refer to appropriate working equipment risk assessment (i.e. mobile scaffold tower, MEWP) Use of well maintained equipment by competent operatives	1 x 4 = 4
Persons at risk: All site operatives			

2.95.1 Task: Working within exposed metal ceiling grid

Hazard	Risk	Control measures	RR
Injuries sustained form exposed sharp metal edges or points	4 x 2 = 8	Remove waste material regularly taking care not to expose sharp edges to others (ie in skips) Exclude others from area when preparing wire hangers All operatives in ceilings are to wear gloves, hard hats, hi-vis, and safety glasses	1 x 2 = 2
Persons at risk: All site operatives			

2.96 Mixing and applying floor preparation products

2.96.1 **Task:** Mixing and applying floor preparation products

Hazard	Risk	Control measures	RR
Risk of skin infections, lung disease, eye damage, intestine damage using evostick or similar	4 x 2 = 8	MSDS's will be obtained for all hazardous substances used COSHH assessments will be undertaken prior to works and precautions including emergency arrangements to be communicated to all operatives PPE selected in method statement will be worn at all times Adequate welfare facilities to be provided by principal contractor or client Suitable ventilation to be allowed for to reduce the concentration of fumes within the immediate area Welfare provisions allowed for to remove contaminants from operatives skin in the event of contact	1 x 2 = 2

Persons at risk: User

2.97 Using mechanical tile cutter

2.97.1 Task: Operating mechanical tile cutter

Hazard	Risk	Control measures	RR
Entanglement in tile cutter	4 x 3 = 12	Ensure power is off before starting work Ensure table wheels are locked before operating tile cutter Clear work area of debris and clutter Secure loose clothing and hair Remove all jewellery from persons	1 x 3 = 3
Persons at risk: User			
Electrocution from water coming into contact with power source or outlet	4 x 5 = 20	Tile cutting to be undertaking in a clear, level and safe designated area Position tile cutter away from any power sources where ejected water may come into contact with electricity Ensure electricity is isolated where in close proximity to tile cutting area Use a residual curren device (RCD) or earth monitoring device where possible and check that it is working daily Check for damage, worn parts, misalignment, damaged saw blade, electric cord before using Do not over fill try with water, only fill to point marker Ensure water is flowing from pump Disconnect power cord, clear away debris, empty water tray after use	1 x 5 = 5
Persons at risk: User			
Serious injuries sustained to eyes or body from contact with flying objects or cutting wheels	4 x 3 = 12	Only operatives with training and authorised to use tile cutting tools should undertake work Correct PPE to be worn at all times when using tile cutters, including safety goggles and gloves Guard on tile cutter to be correctly adjusted to suit work position	1 x 3 = 3
Persons at risk: User			

Damage to lungs through the inhalation of dust	4 x 3 = 12	Where possible, dust extraction to be used or tile cutting work to be undertaken in a well ventilated area All operatives in the area to where correct PPE, masks may be required depending on the application Refer to HSE Construction Information Sheets 36, 54 for further dust control information if necessary	1 x 3 = 3
Persons at risk: User					
Injuries sustained from the use of noisy equipment	4 x 4 = 16	Where possible remove the need for mechanical tile cutting using manual hand tool cutting Designated area for mechanical tile cutting to be used where possible When cutting in situ, area to be cleared of personnel or provided with hearing protection Hearing protection to be worn by operative at all times	1 x 4 = 4
Persons at risk: All site operatives					

2.98 Transporting materials and tools

2.98.1 Task: Removal of materials, tools and flooring systems from carriage vehicle

Hazard	Risk	Control measures	RR
Materials, tools or rolls may fall or items may fall due to damage in transit causing impact/contact/ crush injuries and poor handling techniques causing back injuries or upper limb injury	4 x 4 = 16	Manual handling trained personnel Use mechanical aids such as pallet trucks or carpet barrows Transport distance minimised with unloading procedure All loads and rolls to secured to vehicles for transit	1 x 4 = 4
Persons at risk: User			
Passers-by may be struck by materials for rolls being unloaded	4 x 3 = 12	Manual handling trained personnel Safe working practice, PPE, and warning signs where appropriate Unloading area isolated or cordoned off where practical All planned in advance in daily Safe Start meetings	1 x 3 = 3
Persons at risk: All site operatives			

2.98.1 Task: Transportation of materials from vehicle to job site

Hazard	Risk	Control measures	RR
Materials, tools or rolls may fall or move in transit causing impact injury and poor handling techniques causing back injuries or upper limb injury	4 x 4 = 16	Manual handling trained personnel, Level 5 safety gloves to protect against cuts and safety boots with ankle supports to protect from falling loads, and warning signs employed Mechanical aids such as pallet trucks or carpet barrows to be used Materials to be carried one box at a time (max. 25kg per unit)	1 x 4 = 4
Persons at risk: User			

2.98.1 **Task:** Transportation of materials, tools and rolls from vehicle to job site

Hazard	Risk	Control measures	RR
Poor handling technique by employees manually handling items causing back or upper limb injury	4 x 3 = 12	Manual handling trained personnel Mechanical aids such as pallet trucks or carpet barrows to be used Carrying distances minimised and site access route and duckboards/access route surfacing to be checked for suitability and removal of slip and trip hazards/poor materials etc.	1 x 3 = 3
Persons at risk: User			

2.98.1 **Task:** Storage of materials, tools and rolls on site prior to installation

Hazard	Risk	Control measures	RR
Persons may trip or fall over materials, tools and rolls causing bruising or lacerations	4 x 3 = 12	Manual handling trained personnel Level 5 safety fingered gloves to protect against cuts and safety boots with ankle supports to protect from falling loads Warning signs to be employed and work/storage areas cordoned off with physical barriers Materials to be stored according to manufacturers specifications on a level surface All other materials to be stacked neatly ensuring that stacks are no higher than three times the minimum base width	1 x 3 = 3
Persons at risk: All site operatives			

2.99 Installation of new flooring systems

2.99.1 Task: Installation of new flooring systems

Hazard	Risk	Control measures	RR
Poor handling technique by employees causing back or upper limb injury	4 x 3 = 12	Manual handling trained personnel Mechanical aids such as pallet trucks or barrows to be used Works area to be cleared and cordoned off with physical barriers Method statement for safe fitting to be followed	1 x 3 = 3
Persons at risk: User			
Contact with safety knife blades, cutting equipment, contact with electrical supply	4 x 3 = 12	All plant to be pre inspected before use Self retracting knives to be returned to protective sheaths after use Only battery and 110v operated equipment to be used All equipment to be PAT tested (3 monthly) Level 5 Gloves and Safety Boots with Ankle Support to be worn Ensure working area is well lit through the use of task lights	1 x 3 = 3
Persons at risk: User			

2.99.1 Task: Installation on floor levels and working from height

Hazard	Risk	Control measures	RR
Falling from height and tools, materials to fall on personnel below	4 x 5 = 20	Work areas cordoned off with physical barriers Internal stairs are fully fitted and have edge protection fitted for full use All edges will have protection and operatives only to work from safe and stable positions on stairs or landings Stairs to be closed to other trades (arranged via daily Safe Start meeting)	1 x 5 = 5
Persons at risk: All site operatives			

2.100 Disposal of waste materials

2.100.1 **Task:** Disposal of waste materials

Hazard	Risk	Control measures	RR
Contact with waste materials or chemicals whilst being transferred from the vehicle or the skip which may result in injury	4 x 4 = 16	Appropriate receptacles for waste materials to be used All operatives keep site tidy at all times Ensure any hazardous waste has fully dried in its original container before disposing into site skips Lids to be re fitted to containers before transferred to waste point	1 x 4 = 4

Persons at risk: User

2.101 General painting works

2.101.1 Task: Painting and use of solvents

Hazard	Risk	Control measures	RR
Lung damage caused by inhalation of fumes and skin & eye damage caused by usage of solvents or paints	4 x 2 = 8	All paints must be approved under the health and safety control system Refer to the hazard data sheet for the particular paint for specific information Follow the COSHH assessment for the product, water-based paints are to be used wherever possible Solvent based paints should only be used if there is a technical reason for not being able to use water-based paint All areas must be kept very well ventilated during painting and minimum requirement is to open all doors and windows If solvent-based paints are to be used, additional precautions will be needed (e.g. forced ventilation) Consider use of respiratory equipment in confined areas Avoid skin contact, wash from skin as soon as possible	1 x 2 = 2
Persons at risk: User			
Possible burns caused through contact with solvents or paints	4 x 2 = 8	Wear gloves when cleaning surface Cover cuts and open wounds with onsite first aid supplies, all accidents to be reported to site supervisor Wash and wipe hands before eating, drinking, smoking and after shift	1 x 2 = 2
Persons at risk: User			
Lung damage or difficulty breathing caused by inhaling debris and dust	4 x 2 = 8	Refer to method statement for correct PPE Selected protective equipment to be worn when at risk (i.e. dust mask, goggles)	1 x 2 = 2
Persons at risk: User			

2.102 General locksmith works

2.102.1 **Task:** Gain entry / replacement / new locks

Hazard	Risk	Control measures	RR
Cuts and abrasions from using sharp tools	3 x 2 = 6	Tools will be fit for purpose and maintained Visually check all tools before starting work Additional local lighting provided where required	1 x 2 = 2
Persons at risk: User			
Exposure to asbestos in older fire doors	3 x 5 = 15	All control measures listed in the the Control of Asbestos Regulations act will be adhered too Asbestos register to be checked for content/location All operatives to undergo asbestos awareness training Inspections on site should be carried out before commencing work, if asbestos is identified, or suspected, work should be suspended and site supervisor made aware If asbestos found and controlled, the client or principal contractor shall provide information on the location and condition of the materials to all site operative's Only a licensed approved contractor can undertake removal of asbestos	1 x 5 = 5
Persons at risk: User			
Eye injury from dust and ejected materials	1 x 1 = 1	Goggles worn when using electric tools and where there is a risk of dust or ejected material	1 x 1 = 1
Persons at risk: User			

2.103 Handling and installing glass

2.103.1 **Task:** Handling and installing glass

Hazard	Risk	Control measures	RR
Serious injuries or cuts sustained from broken or exploding glass whilst manual handling	4 x 4 = 16	Follow unloading of deliveries risk assessment As far as reasonably practicable, avoid manual handling of glass by using mechanical handling equipment/vacuum suckers All operatives trained in the safe manual handling of glass For transportable racks, pallets and stillage's, an angle of 5° – 6° is recommended A banksman to be used for transporting large panes of glass Check wind conditions and ensure any movement of glass won't be susceptible to being dropped in freak winds Suitable PPE to be worn, refer to method statement Any working at height to follow working at height risk assessment Disposal of glazing through licensed disposal site When unloading spillages, completely remove glass from the front before attempting to take other panes from the centre of the stack	1 x 4 = 4
Persons at risk: All site operatives & public			
Serious injuries or cuts sustained from collision with installed or stored glass	3 x 5 = 15	Ensure storage area and method of storage suitable for site conditions The glass should not be in contact with any substance that is harder than itself, eg. concrete, stone, ferrous metals The angle of inclination or lean of the glass should be 3° from the vertical on static racks Glass stored on its edge should be supported as evenly as possible over its surface area Cover with sheeting and use appropriate warning signage when stored When full height glass panels fitted to access routes/vulnerable areas ensure manifestation or clear marking in place	1 x 5 = 5
Persons at risk: All site operatives			

2.104 Laying of brick or block paving

2.104.1 **Task:** Manual lifting and laying of paviors

Hazard	Risk	Control measures	RR
Musculoskeletal injuries from lifting and laying paviors	4 x 3 = 12	Paving blocks weighing in excess of 20kg will be laid mechanically unless site circumstances make this impractical Use mechanical means where possible to transport pavers and position as close as possible to working area to avoid stretching Knee pads to be worn when laying paviors, impact resistant glasses to be worn when cutting, dust mask when mixing compounds, boots to be worn at all times	1 x 3 = 3

Persons at risk: User

2.104.1 **Task:** Mechanical laying of paviors

Hazard	Risk	Control measures	RR
Trapped toes or fingers and injuries to body parts from mechanical laying of paviors	4 x 3 = 12	Vacuum lifting will be used in accordance with manufacturers instructions by trained operatives All lifting gear is to be visually checked daily and hold a current certificate of thorough examination (thorough examination to be carried out every 6 months) Paving blocks will be lifted into place using vacuum lifter suspended from suitable machine	1 x 3 = 3

Persons at risk: All site operatives

2.105 Laying tarmacadam

2.105.1 Task: Working with hot bitumen

Hazard	Risk	Control measures	RR
Serious or fatal burns to person from handling hot bitumen of incorrectly operating bitumen boiler	4 x 4 = 16	Ensure working area is adequetly fenced off to protect the public and others within the vicinity and prevent any unauthorised access Operators must be trained and competent in the operation of the bitumen boiler and understand emergency requirements if burns occur onsite All operatives must wear the correct personal protective equipment, including heat resistant long sleeve gauntlets, overalls, safety boots, hard hat and eye protection when transferring hot materials A live bitumen boiler must not be left unattended The bitumen boiler must bot be moved when the bitumen is fluid Ensure that bitumen does not come into contact with water, and should not be user near watercourses etc. Bitumen blocks should be broken into management pieces where necessary and the bitumen boiler must not be overfilled Transport bitumen manually in pouring cans, never fill above the 3 quarter mark All machined must be inspected and well maintained A nominated first aider shall be present at all times near work, and first aid kit to contain burns dressings and treatment for burns	1 x 4 = 4
Persons at risk: All site operatives & public			
Fire caused by unsafe transporting or materials or maintaining boiling plant	4 x 5 = 20	Refer to combustible materials risk assessment for general controls All operatives must be trained in the safe use of LPG All operatives must be trained in the correct type of extinguisher, dry chemical and not water extinguishers No open flames to be used near bitumen No smoking near bitumen	1 x 5 = 5
Persons at risk: All site operatives			

2.105.1 **Task:** Applying tack coat to aggregate surface

Hazard	Risk	Control measures	RR
Injuries sustained from the incorrect use of tack spraying machine from run away sprayer	3 x 3 = 9	All operatives must wear PPE as selected from method statement The operator must be trained and competent in the operation of the machinery Machinery to be inspected and well maintained, and correct hose and fittings to be used at all times	1 x 3 = 3

Persons at risk: All site operatives & public

2.106 General cleaning works

2.106.1 Task: Using cleaning products

Hazard	Risk	Control measures	RR
Contact with bleach and other cleaning chemicals causing irritation or eye damage	4 x 3 = 12	Follow PPE requirements, long-handled mops/brushes, and appropriate gloves should be provided as standard and operatives trained in their use All operatives trained in the risks, use and storage of cleaning chemicals and wear PPE when handling chemicals or as instructed Any cleaning cleaning chemicals marked 'irritant' must be substituted, where possible, for milder alternatives Employer to provide cleaning machines designed to minimise handling of cleaning chemicals by operatives All operatives to be reminded to wash gloves and aprons after use Any health problems from cleaning will be reported to supervisors, operatives to check for dry, red or itchy skin on their hands	1 x 3 = 3
Persons at risk: User			
Slips, trips or falls caused by using cleaning products to floor surfaces	4 x 3 = 12	See slips trips and falls for general controls The correct cleaning equipment shall be used for the job and staff to follow safe systems of work Areas shall be cordoned off where possible and correct signage for slippery surfaces to be provided at all times Any spillage's of liquids to be cleared up immediately and floor left dry Operatives are to never leave cleaning materials or equipment unattended Where possible use cleaning machines without cables, and where cabled machine necessary ensure plugged in at closest socket to works with appropriate signage to illustrate trip hazards Ensure all areas are well lit during cleaning, and whilst surfaces are still drying	1 x 3 = 3
Persons at risk: All site operatives & public			

2.106.1 **Task:** Cleaning at height

Hazard	Risk	Control measures	RR
Serious injuries such as bruising or fracture from falls from height whilst cleaning	4 x 4 = 16	'No ladders' policy will be enforced when cleaning form height All high-level cleaning done by trained staff working from floor level, using telescopic poles with cleaning tools attached Access equipment will be used as last resort, if needed relevant access equipment risk assessment will be provided	1 x 4 = 4

Persons at risk: User

2.106.1 **Task:** Machine cleaning of floor space

Hazard	Risk	Control measures	RR
Injuries from improper use of cleaning plant	5 x 2 = 10	All cleaners trained in the safe use of machines and wear correct PPE as mentioned in method statement The correct machine will be provided for each job Damaged plugs, cables and on/off switches will be checked before using All machines will be regularly maintained and examined by a competent person	1 x 2 = 2

Persons at risk: User

2.106.1 **Task:** Cleaning up or around sharps

Hazard	Risk	Control measures	RR
Picking up litter with potential injury from sharp objects	4 x 2 = 8	Operatives trained in safe systems of work and provided with suitable tools (litter pickers) and personal protective equipment Staff to be continually reminded of dangerous of sharp objects whilst cleaning	1 x 2 = 2

Persons at risk: User

2.107 Operating pressure washing plant

2.107.1 **Task:** Operating pressure washing plant

Hazard	Risk	Control measures	RR
Electrocution to user from water coming into contact with a power source	4 x 5 = 20	Use 110V equipment where practicable Maintain equipment in efficient working order If possible use a cleaner that is fixed it in one place, with permanent wiring to the supply If a work is mobile in nature, check flexible cables and plugs/ sockets daily for visible signs of damage and do not use if damaged or faulty Use waterproof electrical connections in the work area Use a residual curren device (RCD) or earth monitoring device, with pressure cleaners that have flexible cables, and check that it is working daily	1 x 5 = 5
Persons at risk: User			
Skin irritation, dermatitis, asthma and zoonoses from substances such as cleaning agent, oil, mud residues and disease organisms from mist	4 x 2 = 8	Always wear correct PPE, including eye protection and waterproof clothing Remove accessible heavy deposits by scraping and then shovel up waste Do not stand in front of cleaning jet whilst in use Protect user and surrounding operatives or public from mist with traffic management, signs etc. Conduct low-level health surveillance for dermatitis involving skin checks by suitably trained responsible person Provide warm water, mild skin cleansers, nailbrushes, and soft paper, fabric towels or hot air for drying and avoid abrasive cleansers	1 x 2 = 2
Persons at risk: All site operatives & public			

Water penetration of human body	4 x 5 = 20	All operatives should be trained to use the water jetting system safely. All jetting operations are undertaken by two operatives for safety reasons and also to allow frequent activity stops. Correct PPE TO BE issued. First aid equipment will be available together with specialist first aid advice for water injection. Communications will be made available by radio and phone to obtain assistance.	1 x 5 = 5
Persons at risk: All site operatives			
Major Injury caused by busting of hose or faulty equipment	4 x 5 = 20	All equipment will be maintained according to manufacturers schedules and checked before each use.	1 x 5 = 5
Persons at risk: All site operatives			

2.108 Installation of cable trunking and trays

2.108.1 **Task:** Fabrication and fixing of metal services i.e. conduit, baskey tray unistrut

Hazard	Risk	Control measures	RR
Injuries or cuts to hands and eyes from general fixing and assembly of metal services	4 x 2 = 8	Follow the using portable tools or equipment risk assessment Ensure a safe area is designated by site management to materials into size Materials to be deburred and sharp edges to be removed	1 x 2 = 2

Persons at risk: User

2.108.1 **Task:** Installation of cable trunking and trays at height

Hazard	Risk	Control measures	RR
Falls from height during cable tray installation causing serious injuries	4 x 4 = 16	Follow working from height risk assessment specific to access equipment being used When installing cable trunking or trays at height be sure to employ safe system of work including having another operative to assist with placement and mounting	1 x 4 = 4

Persons at risk: User

Site briefing and induction form

McCrone Mews

All persons who have signed below confirm that they have been briefed on the safe working methods and arrangements detailed in this method of work statement.

Date	Name	Signature