



## Method Statement

### Method Statement Details

<b>Method statement number</b>	13
<b>Method Statement Date</b>	Tuesday 16th January 2018
<b>Method statement Author</b>	Angela Deakin
<b>Project/Contract</b>	Sheffield Road, Birdwell Development
<b>Start Date</b>	TBC`
<b>Expected job duration</b>	Approx 15 months
<b>Client Contact</b>	Stardust Developments Ltd 07450552710
<b>Description</b>	Construction of 5 New Build Properties with road and private parking spaces
<b>Site Address</b>	Land off Sheffield Road Birdwell Barnsley S70 5TD

### Signatures

	Name	Title	Signature	Date
<b>Document Author</b>	Angela Deakin	Managing Director		17/01/18

### Data protection statement

The information and data provided herein applies only to the contract for which it was written, it shall not be duplicated, disclosed or disseminated by the recipient in whole or in part for any purpose whatsoever without the prior written permission from HS Direct Ltd.

It is the duty of all employees to observe the following Risk Assessment framed to provide a code of good practice and conduct with the object of preventing accidents. At all times employees must work in a safe manner both to prevent personal injury to themselves or to other personnel.

### Emergency Contact Details

<b>Name</b>	Angela Deakin	Andy Deakin	Kevin Thornton	Simon White
<b>Telephone Number</b>	01226210273	07887 647985	07799060827	07507573332

## **General Precautions**

To be observed by all staff at all times, any deviation from these control procedures must be authorised by the site foreman or safety representative.

### **Communication with Other Workers on Site.**

All staff will report to the site office for induction on arrival at the site. The site manager will inform staff of any hazards that are present on site. Staff will inform the site manager of the work to be carried out and how it could affect other trades working on the site.

Where necessary notices will be posted advising of any hazards present during the works.

### **Contractor and Visitor Safety**

A.Deakin Developments Ltd will liaise with other contractors staff on a day to day basis and ensure they are aware of the risks present during the works. Staff and contractors will not leave any area of work in a dangerous condition or with risks to themselves, other contractors, tenants, or visitors, all tools and equipment will be cleared to secure storage at the completion of each shift. Heavy plant, scaffold, ladders and any other access to height will be made inaccessible.

### **Erection and Maintenance of security hoarding including decorative displays and facilities for public viewing**

Temporary security fencing will be erected around the site boundaries and entrance, as well as for the protection of any trees specified in the survey and tree protection plan. Daily inspections of the site, fencing and signage will be recorded and any remedial work will be rectified immediately. Safety signs will be in full view on the Sheffield Road side and around the boundaries of the site.

### **Loading and unloading of Plant and Materials**

Loading and unloading of plant materials will be done on site. RAMS and the Health and Safety policy will be adhered to to ensure public and operative safety. Loading/ unloading will only take place during the specified times 0800 to 1800 weekdays and 0900 to 1400 Saturdays.

### **Means of Access for Construction Traffic**

All construction traffic will access to and from the site via the Sheffield Road entrance adjacent to the chemist. Construction traffic will be active from 0800 to 1800 weekdays and 0900 to 1400 on Saturdays. In the interest of public and highway safety, banksmen will be used on and off the site. Clear signs will be displayed to prevent parking at the site entrance or public parking on site.

### **Measure to control the emission of dust, dirt and noise during construction.**

RAMS, Health and Safety Policy, Environment policy to be adhered to and given on induction. Security fencing to be covered with netting to prevent the spread of dust and dirt. Dust extractors used when possible and wet cutting to minimise dust. Noise will be kept to a minimum to prevent disruption to neighbouring dwellings and businesses. Site hours will be adhered to at all times as per planning specifications.

### **Parking of Vehicles of Site Operatives and Visitors**

Parking for site operatives and visitors will be onsite. Parking areas will be constructed and turning bays formed. Information will be given in sign form on access to the site as well as communicated with suppliers and sub-contractors.

### **Site Access and Egress**

The principle contractor is responsible for providing safe access and egress to the site, A. Deakin Developments Ltd staff will ensure safe access and egress is maintained for themselves and other contractors in the area they are working in, good standards of housekeeping will be maintained.

### **Storage of plant and materials used in constructing the development.**

Allocated areas will be given for the safe storage of plant and materials on site. This will be adhering to the specifications in the RAMS, to minimise any risk to the public or operatives. There will also be a secured cabin on site.

### **Tenants Warning and Safety**

Special attention will be paid where there are elderly, infirm or children present. Safe access and egress for tenants will be erected and maintained. A.DEAKIN DEVELOPMENTS LTD staff will not leave any area of work in a dangerous condition or with risks to themselves, tenants, and other contractors. A.DEAKIN DEVELOPMENTS LTD will liaise with other contractors on site for the purpose of exchanging information regarding work schedules and safety. The site will be fenced off and locked when not in use and safety signs to not access the site will be clearly displayed.

### **Vehicle Safety**

All company vehicles are subject to a planned maintenance and inspection program. Staff responsible for vehicles will carry out regular checks to ensure continued roadworthiness. All drivers will hold the appropriate licence for the vehicle they are driving and they will comply with road traffic regulations and the Highway Code. All loads will be securely fastened to the vehicle by competent persons prior to travel. Drivers will take regular breaks on long journeys. Banksman will be used when reversing/ turning or manouvering.

### **Wheel Washing Facilities**

Wheel washing facilities will be provided on site and area allocated and signed. Wheel washing will be completed on site to minimise disruption and soilage/ unsightliness to the highways and surrounding pathways.

### New Drainage Installation

1. Check site and mark out proposed drainage runs as plan.
2. Check area to be excavated by means of services utility drawings and CAT scan
3. Mark any services found making sure to extend beyond the work area
4. Excavate trial holes by hand to locate any identified services
5. Close off the work area using secure fencing to prevent unauthorised access, if on a public highway also use signs to chapter 8
6. Excavate trench by means of a 360 excavator with a banksman to manage traffic, pedestrians and public, All material excavated is to be stored well clear of the excavation for re-use as backfill, or loaded on to transport and removed from site.
7. Once located, any services to be revealed and supported as necessary to enable installation of new drainage.
8. Excavations to be taken to specified depth and base layer of pea gravel or sand - as specification - layed and raked to required fall.
9. Place PVC drainage sections in to the trench, connecting progressively with slip on fittings. Ensure properly knocked home.
10. Check falls are correct before back filling over the pipe with pea gravel as specification.
11. Fit gullies, hoppers, inspection points or upstands to finished ground level.
12. Connect drain pipework into main sewer at or above invert level via identified inspection chamber. (May require temporary bung insertion into main sewer up-line to enable works to be completed safely. (Arrangements to be made with relevant water authority and local authority if access is required in public highway.)
13. On completion of break into main sewer, then bung is to be removed to restore natural flow. (Any back up behind bung may require removal by tanker prior to removal.)
14. Backfill the trench with MOT type 1 and compact in layers using a whacker foot
15. Top off using matching materials.
16. Remove signs and barriers from site

### Aerial/Satellite Installations

1. Assemble all equipment required
2. Carry out a visual inspection of all equipment
3. Tie rope to top of ladder stile with Karabiner and extend ladder to working level, tie loose end of rope to bottom of ladder
4. Level ladder in position using ladder fix bases
5. Drill and fit re-useable eye bolt to wall at approx 1 Metre height
6. Connect eyebolt to ladder with ratchet strap
7. Coil rope away from base of ladder to prevent trip hazard
8. Fit rope grab and check for operation
9. Lay roof ladder from top of ladder to work area and lash ladders together
10. Never leave roof ladder unless secured by fall arrest system
11. Inspect chimney and ensure it is sound, do not attach to unsafe chimneys
12. Fit lashing kit or Satellite bracket to chimney
13. Mount Aerial and pole to lashing kit or dish to bracket
14. Ensure Antenna system is fixed correctly and rigid enough to withstand high wind speeds
15. Set co-axial/Satellite cable and fix to mast/chimney with cable cleats or specified proprietary fixings
16. Fix co-axial/Satellite cable to wall and run to required position
17. Clip down walls to entry point and route through leaving a drip loop below entry point
18. Terminate cables in required positions i.e. wall mounted sockets
19. Check all connections and cabling for security and integrity
20. Tidy work area and remove all debris to designated waste area

### ATV Telehandler Fork Lift

This vehicle is classed as work equipment and as such falls under the Provision & Use of Work Equipment Regulations - PUWER - which call for regular inspection and maintenance. It should be visually inspected prior to use and any faults should be rectified as soon as possible. If any fault is immediately detrimental to its operation, it must be withdrawn from service for immediate repair. Records of inspection and maintenance should be held as evidence of compliance.

The vehicle is also classed as lifting equipment and subsequently falls under the Lifting Equipment & Lifting Operations Regulations - LOLER - which call for regular Inspection, Maintenance and Testing by a competent person. Maintenance

and inspection / test records must be retained as evidence of compliance.

This vehicle is designed to work on all terrain whether it be unmade ground or surfaced. It is important that any load is picked up with the vehicle in a horizontal position on the left - right axis. Unloading must also be carried out in the same level position.

Loads must be within the safe working load (SWL) capacity of the vehicle.

Loads must always be carried at low level and only raised to height when picking up or off-loading to a level resting point.

Raising a load on a sideways slope will effectively shift the centre of gravity and will increase the risk of turning the vehicle over. Also, traveling across a slope may cause a load to slide sideways off the forks. This activity should be avoided at all times.

When climbing a slope, the load must be facing the incline to prevent it sliding forward off the forks.

When descending a slope, the vehicle should be reversed down the slope to prevent the load sliding off the forks.

When a load is safely on the forks, the jib must be retracted and lowered to low level for travel whilst ensuring there is a ground clearance to prevent contact on undulations. Failure to retract the jib may cause a lever effect which may imbalance the machine and cause the rear wheels to lift off the ground causing steering and traction difficulties.

The operator must be trained and deemed competent to operate the machine and should ideally hold a certificate to demonstrate this, eg. a CPCS - Construction Plant Competence Scheme - code A17 or similar.

The operator must have good all round visibility at all times so rear view mirrors and screen wipers must be in full working order.

Lights must be in full working order at all times.

Machine guards must be secured in position and be in good condition to provide protection as manufacturer design.

## **Beam and Block Flooring**

1. Install beams and split course blocks onto damp proof course.
2. Beams to be placed at various standards depending on span and applied load.
3. Beams are positioned according to the layout drawings, perpendicular to the end supports with a nominal bearing of 100 mm to each end when supported by brick or block.
4. Beams may need to be staggered at the internal walls and multiple beams may be required to support partition walls.
5. 100 mm deep building block infill to be used between all beams.
6. Where required, blocks should be cut using suitable mechanical means to leave a clean, vertical, square-edged face.
7. Once all the blocks have been placed in position, the floor is grouted using a 4:1 sharp sand/cement mixture, which is brushed in the direction of the beams and then at right angles to ensure all joints are completely filled.
8. Apply finish to flooring.

## **Central Heating Boiler and Radiators Installation**

1. Only competent and appropriately qualified personnel are able to undertake this task, i.e. Gas Safe Registered.
2. Obtain hot work permit (if required) from the Operations Manager (or their designate).
3. Where practical no hot work should be carried out within 1 hour of the end of a shift
4. Isolate gas supply at meter and local isolation valve.
5. Check the system is isolated and disconnected from the power supply
6. Isolate the water supply to enable drain down of the old boiler and radiator system prior to disconnection and removal.
7. Release and remove the boiler casing to safe storage area for recycling.
8. Disconnect all pipe feeds and electrical connections for power and controls.
9. Care should be taken when handling the edges of sheet metal parts; suitable safety gloves may be required.
10. Disconnect the existing flue and remove for recycling.
11. Release fixings and remove the old boiler with assistance, and place in safe disposal area so that it does not pose a trip hazard.

12. Mark out and prepare mounting points for the new boiler, drill and install proprietary fixings as specified. Mark out and prepare flue position prior to installation.
13. Using a suitable size masonry core drill, bore through the external wall to provide aperture for new flue.
14. Check the new boiler paying due consideration to: connections; correct flow and return; heating safety valve outlet pipe, condense drain, gas inlet and water feed are sited correctly to manufactures specification and plan.
15. Check the boiler location has the correct clearance and flue angle; the terminal position is exposed to external air; should a terminal guard be needed it is fitted according to manufacturer instruction; the plant room or compartment ventilation is adequate etc.
16. All pipework within 1 metre of the boiler to be in copper tube to size as specified and connections to be made with metal compression fittings
17. With assistance, engage the boiler on the mounting brackets and secure, checking level.
18. Locate all pipework connections, position and fix using compression fittings with brass ring cone fittings. Check all are secure

## Radiators Installation

1. Determine pipework runs through the property
2. Close off the work area and inform tenants / others of unsafe areas where floors are lifted.
3. Prepare access by lifting floorboards where necessary.
4. Run pipework and prepare pipe ends for installation of soldered joints
5. Ensure adequate ventilation available to remove solder fume
6. Where solder work has to be carried out, prepare pipe work for solder joints and use correct PPE (heavy gloves, eye protection, overalls etc.
7. Protect surrounding area with heat shields.
8. Ensure the correct type of fire extinguisher is on hand during hot work.
9. Connect and solder all necessary joints.
10. Check all joints.
11. Ensure all pipework is clipped / secured to prevent movement / vibration, but allow expansion.
12. Mark out and mount radiator brackets using suitable proprietary fixings.
13. Mount radiators in position.
14. Prepare pipework and make connections to valves
15. Check all pipework connections are secure.
16. Fill the system with water and check for leaks
17. Bleed all radiators and pressurise system to operational pressure.
18. Check for leaks.
19. Replace all floor timbers removed for access.
20. All electrical works must be conducted by a suitably qualified electrician, who will ensure that all electrical connections and fusing systems are made according to the manufacturer's instructions and the boiler is earthed
21. All electrical work must comply the current regulations BS 7671 and IEE 17th edition.
22. The entire system to be flushed clean and refilled to include inhibitor
23. System to be pressurised and bled to remove any air trapped within the system
24. The boiler must be commissioned, paying regard to the: filling methods and system pressure, connection and flow; purging of air; lighting method; heating temperature, fuel supply etc.
25. The heating output should be set.
26. All safety devices should be checked and the display on the visual I.e.d. noted.
27. Any settings should be adjusted as required.
28. Undertake safety checks in compliance with manufacturer Installation specification.
29. Replace all covers paying due regard to the hazards posed by sheet metal parts.
30. Provide instruction and issue any required paperwork and manual to client.
31. Carry out final fire checks at least one hour after hot work has been carried out.
32. Report to Operations Manager or their designate and sign off permit to work (if issued.) / Client.

## Digging Out - Trial Hole By hand

1. Put on PPE
2. Set up Exclusion zone, erect barriers and safety signs as required
3. The area of excavations will first be checked for live services using cat scanners and plans where possible.
4. Any existing services will be protected or moved as required by competent persons.
5. Hand dig using pick and shovel excavate to a depth as specified on plans or clients requirements.
6. Excavate trench as per plans to a depth not exceeding 1.20m.
7. In the event of the need to excavate deeper, then provision must be made for installation of shuttering to prevent collapse whilst continuing excavation to adequate depth to inspect the foundation.
8. To prevent the potential for subsidence or collapse batten back and or support using shuttering as required.
9. Removed infill manually until the trench is at required depth.
10. On completion of inspection;
11. The trench will be backfill with crushed limestone compacted in layers not exceeding 150mm using a hand rammer.
12. Levelled off with either soil or paving to match surrounding existing surface.

13. The finish level will be the responsibility of the site foreman to ensure no hazards remain on the site.
14. Excess spoil is to be removed to designated area for re-use elsewhere on site using wheel barrow transport.
15. Remove equipment, barriers and notices from site.
16. Site client and or tenants are informed of works completion.

## **Double Glazing Installation**

1. Unload delivery vehicle of double glazing units and glass.
2. Double check all materials are present and measurements are correct prior to work starting. Identify specific locations on frame
3. Stack materials in a safe place. Glass should be stood on its edge.
4. Keep working area clear of any tenants or members of public.
5. Plan a route where glass can be carried into the working area with minimal obstruction.
6. When carrying glass, a marker must be placed on the glass. This is usually in the form of an X.
7. Ensure safe access is available at each window opening. Temporary handrails may be required in locations where cill height is below 940 mm from floor level (internal access).
8. Prior to the installation of the frames, foam expanding spray will fill the cavity in the wall, or fit cavity cladding panels dependant on specification.
9. Check trickle vents are fitted, clip in as necessary.
10. The frame will then be offered up to the window opening and packed with shims to centralise. Drill for proprietary fixings through the central section of each side of frame. Ensure frame is plumb and level
11. Feed through fixings with screws, ensure plugs are bedded and tighten screws onto frame. Ensure frame is plumb and level.
12. Offer glass panes into the frame and check depths top, bottom and sides.
13. Place packers in to the frame at bottom and one side to centralise the glass unit.
14. Unpack pre-cut beading and fit once glass unit is installed.
15. Continue process to complete all panes installation
16. Remove frame protection film. Ensure anti-scratch pads are remove from external face of each unit if present.
17. Apply PVC trims (if specified) using adhesive silicone.
18. Finish by sealing frame to brickwork gaps with silicone sealant, colour as specified.
19. Remove all waste and tools from the site.
20. Waste to be placed into skips provided.

## **Drain construction to existing sewer connections**

### **Making a new connection to the public sewer**

1. Determine location and route of existing main sewer in association with local water authority.
2. Obtain necessary permissions for breaking in to the sewer and also for possible partial road closure and excavation works.
3. Make all preparations for road works, traffic control and diversions as necessary.
4. Check all service plans and CAT scan area to ensure no interference with other services. If present, then hand dig within 500 mm and support as necessary.
5. Cut out tarmac and commence excavation using suitable excavator. All spoil to be loaded directly into skip or wagon for removal and disposal or re-use as determined. Depths greater than 1200 mm will require shoring to prevent collapse, may be by hydraulic box or constructed shuttering and bracing in compliance with appropriate design.
6. Note hand dig only within 500 mm of sewer location.
7. Excavation to be taken below the sewer to enable cutting of the sewer pipe.
8. Prior to cutting the sewer pipe the sewer will require a bung fitting at the next inspection manhole up line. Arrangements must be in place for safe access.
9. A section of the existing sewer is to be neatly cut out using a suitable pipe cutter or disc saw and the cut out section removed.
10. A new Junction is to be inserted and connected to the existing pipe using secured banded couplers to form flexible joints.
11. The new junction pipe to be positioned such that the inlet is set at invert level.
12. The new foul drain is to be connected and secured into the Junction.
13. Any required inspection to be carried out before infill
14. The area below the sewer is to be backfilled with pea gravel to provide adequate support and to cover pipe.
15. Bung to be removed to re-instate sewer flow.
16. Suitable backfill to be replaced in depth of 300 mm and compacted with whacker or similar before adding additional courses and compacting up to road surface level.

17. Tarmac to be made good using similar grades and compacting to form level surface with existing.
18. Clear all waste for disposal
19. Remove all barriers and signs etc.
20. Re-instate normal traffic flow

### **Connection to existing manhole**

1. Obtain necessary permissions for breaking in to the sewer and also for possible partial road closure and excavation works.
2. Make all preparations for road works, traffic control and diversions as necessary.
3. Check all service plans and CAT scan area to ensure no interference with other services. If present, then hand dig within 500 mm and support as necessary.
4. Excavate new drain trench to outside of manhole and at depth to ensure drain can be set at invert level.
5. Cut a hole through the existing manhole side wall using a suitable core cutter.
6. The new connection should be set so that the top of the connection pipe is at the same level as the top of the main pipe within the manhole.
7. Connection stub pipe should then be inserted through the hole and concreted in place.
8. Manhole benching should be formed to direct new flows into the main channel.
9. Back fill to plans and make good ground around manhole and chamber
10. Clear all debris from site
11. Remove barriers and signage
12. Re-instate normal traffic flow / pedestrian access

### **Dry fit Kitchen units and worktops**

1. Fit new pre assembled unit carcasses as per contract drawings.
2. Ensure the units and carcasses are level and plumb
3. Secure to walls using appropriate proprietary fixings
4. Prepare new work tops, measure and cut to length. Identify and mark positions for cut outs for sink and hob locations,
5. Mark out openings from templates provided and cut out from top face ensuring no edge damage to top surface by using downcut blades to jigsaw.
6. Jointed work tops must be cut using mitre jig and router to ensure square joints
7. Joints to be sealed and clamped from underside prior to final positioning
8. Worktops to be secured to top of carcasses using csk screws from underside of frames.
9. Mark out and drill doors and drawer fronts for handles, fit and secure handles
10. Fit new unit doors and adjust to ensure correct alignment
11. Prepare and fit all trims and cornices etc.
12. Large and /or awkward items to be tandem lifted
13. Clear all tools and waste from area and remove to designated waste skip for disposal

### **Duct laying in Tarmac Footpath**

1. Check area to be excavated by means of utility prints and CAT scan
2. Mark any services found making sure to extend beyond the work area
3. Excavate trial hole by hand
4. Guard off the work area using barriers, if on a public highway also use signs in compliance with Chapter 8
5. Saw cut the intended area to be excavated by means of a Stihl saw or similar
6. Excavate trench by means of a 360 excavator with a banksman. Depth of trench is 450mm in a footway area and 700mm in a carriageway area
7. All material excavated is to be placed on the wagon and removed from site
8. Place the duct in the bottom of the trench, connect the duct to previous laid duct and make sure it is properly knocked home
9. Surround duct with sand or pea gravel as specification
10. Backfill the trench with MOT type 1 and compact in layers using a whacker foot
11. Lay 20mm tarmac base and compact
12. Top off using matching materials to the surrounding footpath
13. Clear any remaining debris and sweep surfaces
14. Remove signs and barriers from site

## Dumper Truck Use

1. Dumper trucks are normally hired as and when required.
2. Dumpers may only be used by authorised operatives holding relevant Plant Operator's License. (CPCS A09, A56, A57)
3. A certificate of worthiness must be provided by the hire company before the equipment is used.
4. Daily checks will be carried out by the Operator on oil, water, tyres, lights, brakes, seat belt and Anti-roll bar, etc.
5. Any defect will be reported immediately and if appropriate the equipment will be taken out of use.
6. The dumper must be driven with caution taking particular notice of site personnel and general public.
7. Operator should be familiar with site conditions and identify any hazardous areas, .e.g. excavations, manholes, drains etc.
8. Warning beacons must be used when moving, seat belts must be worn at all times and a banksman present where visibility may be inadequate..
9. The driver must adhere to the traffic management plan.
10. A 5mph restriction is in place on site.
11. Do not drive on gradients in excess of those safe for the dumper (see manufacturer's instructions)
12. Only competent people to drive site dumpers
13. Ensure wheel stops at the edges of excavations, pits, spoil heaps etc to prevent site dumpers falling when tipping. Blocks must be positioned and anchored a sufficient distance away from any unsupported edges and slopes to prevent the weight of the vehicle causing collapse.
14. Ensure purpose-built platforms for regularly transported items, eg large drums
15. Follow safe systems of work at all times
16. Do not operate the site dumper's controls unless seated on the driving seat
17. Do not carry passengers unless purpose-built seats are provided
18. Manoeuvre carefully on sloping ground
19. Drive at appropriate speeds for site conditions
20. Load on flat ground with brakes applied
21. Get off the dumper when it is being loaded
22. Ensure loads are distributed evenly and do not let them obscure your vision
23. Securely fix loads which may cause danger if they move
24. Stop the vehicle, take it out of gear and apply the parking brake before tipping loads
25. Do not drive around with the skip in the vertical discharge position
26. Use the correct towing pin (not a bent piece of reinforcement bar)
27. Do not leave the engine running when you leave the vehicle
28. Be aware of the differences in performance of site dumpers when loaded and unloaded, particularly speed, braking, and stability on slopes
29. Be aware of the different handling and braking characteristics of the vehicle in wet or icy conditions
30. Do not alter tyre pressures outside the manufacturer's specifications
31. When using a starting handle ensure
32. - neutral gear is selected and the handbrake is firmly applied, and the area is clear of obstructions- the starting-handle is the correct type and in good condition with a handle grip which rotates freely- your thumb is kept on top of the grip of the handle to prevent injury in case of kickback

## Erection and Dismantling Aluminium Zip Scaffold Tower

1. The tower must be erected by a trained competent person in compliance with manufacturer specification and detail.
2. The site for location of the tower must be checked for a firm base. It must be level and able to support the load of the tower, personnel and any tools and materials likely to be used within the Safe Working Load specification.
3. Any undulations or soft surface must be packed and compacted and covered with a suitable base to support wheels or feet.
4. With assistance, the tower end frame should be positioned with feet or wheels attached as required.
5. Attach bottom side rail to each side.
6. Position second tower end frame with feet or wheels attached to match other end.
7. Attach bottom side rail.
8. Attach brace tube to 1st tower end. Connect to opposite end frame which will enable unit self support.
9. Connect 2nd bottom side rail.
10. Attach 2nd brace tube to opposite side to reverse angle to ensure brace in both directions.
11. Check tower is plumb vertical in both directions, adjust as necessary using screw adjustment on feet / wheels.
12. Ensure brakes are applied.
13. Fit stabilisers to each corner, lock in position and ensure feet are fully supported.
14. If using advanced guard rail system, then attach a guard rail panel to each side of the tower and raise to position for fixing next lift. As each lift is completed, these should be raised to protect the next lift.
15. If using 3T (Through the trap) system, fit the first base platform and through the trap fit handrails.
16. Lift a second lift end section into place.
17. Fit a further brace tube to support in alignment with one directly below.
18. Attach another end section and secure with a further brace tube in reverse pitch to hold in place.
19. Fit a further deck section to enable access to fit hand and intermediate side rails.

20. Use internal ladder to access to height.
21. Fit additional hand and intermediate rails above each deck level.
22. The tower must be inspected and checked complete prior to use.
23. Where applicable, a hand over certificate should be presented and a scaf-tag attached.
24. For extended use, the tower must be checked before use on a daily basis. Every 7 days it must be inspected and scaf-tag updated

1. Dismantle the tower in reverse sequence by lowering deck section to enable safe access to remove hand and intermediate rails.
2. Lower deck section to enable safe removal of bracing and end section.
3. Remove second bracing and second end section.
4. Progressively work down the tower to lowest end sections
5. Fold in stabilisers and remove from the end frames
6. Use assistance to support the frame when disconnecting final bracings and bottom rail tubes.
7. Collect all fittings and remove from site for transport or safe storage.

## **Excavation of Footings**

1. The work area is to be cordoned off and barriers erected to prevent unauthorised access.
2. Mark out area to be excavated in compliance with design plans, with marker paint
3. Check local area service plans and identify routes of any gas, electric, water and telecoms, etc.
4. Carry out CAT scans of ground to check and confirm live services.
5. Arrange for existing live services to be shutdown where possible
6. Bring heavy machinery onto site following safety procedures listed above
7. Excavators and other mobile plant to be operated only by trained personnel holding relevant certification.
8. Ensure trained banksman is available to manage excavation work and plant movement
9. Excavate ground as per contract drawings to required width and depth.
10. Spoil to be removed to designated storage area for re-use as required on site. Must not be stored within 2 metres of trench excavations
11. Where live services have been located machines must not dig within 0.5 meters
12. Hand dig around live services where necessary using spade and shovel.
13. Services to be supported securely to prevent damage or collapse during the works.
14. Live services may be capped off by the local authority / supplier as necessary.
15. Any services to remain live during the works MUST be identified and signs posted advising of LIVE.
16. Ensure that excavations are cordoned off with secure barriers
17. Excavations deeper than 1.0 metre must be shuttered, benched or battered to prevent collapse
18. Flooding must be controlled by pumping out as necessary.
19. Excavations must be inspected by a competent person prior to allowing personnel access to carry out any works.
20. All excavations must be left safe at the end of each shift

## **First Fix Joinery**

### **FLOOR JOISTS**

1. Measure up number & lengths of floor joist required
2. Collect lengths of wood from storage area and take to cutting area
3. Check joists for straightness, do not use bowed joists
4. Cut joists to required lengths
5. Fit joist hangers in position as per contract drawings (if to be used)
6. Level joists using spirit level or theodolite
7. Lay temporary platform for use as work area or lay weather protective safedek boards as per drawings
8. Lift the first floor joists into position using the telescopic handler if available, if Not ensure good manual handling techniques are observed
9. Level joists using spirit level or theodolite
10. Lay first floor temporary platform for use as work area or lay weather protective safedek boards as per drawings

### **ROOF TRUSSES**

1. Bolt timber 100x100 timber wall plate to inside of party parapet wall as per architect drawings using m12 Rawlbolts at 600mm ctrs
2. Lift roof trusses up the outside of the scaffolding using a crane or telehoist and place in the centre of the wall plates, manually distribute to the point of use
3. Fix roof trusses to 100x100 timber wall plate using supplied cleats by screwing into timber
4. Work from centre of roof to both gable ends ensuring trusses are level and at correct centres

5. Fit storm bracings and cross ties to roof trusses
6. Measure and cut the barge boards and fix to the end truss with proprietary fixings
7. Measure and cut the fascia boards & fix to the rafter feet with proprietary fixings
8. Measure and Cut the Soffits to size and fix

## **STAIRCASE**

1. Ensure staircase in position ready for fitting
2. Cut bottoms of strings square to sit on floor
3. Cut top strings over trimmer joists to hold stairs in position
4. Fix through strings into the wall to secure stairs using supplied fixing screws
5. Fix under third tread from bottom using small stud frame to give support
6. Check stairs for strength and fully test before handover

## **WINDOW / EXTERIOR DOOR FRAMES**

1. Ensure damp proof membrane is in position
2. Test fit the frame and shave down if necessary
3. Fit the frame, test for level sill
4. Temporary wedge the frame in place in preparation for fixing and check for plumb
5. Drill the fixing holes and screw fix with raw plugs or frame fixings
6. Cut the interior sill to size and fix with propriety fixings

## **STUD WALLS**

1. Mark out the position of the internal walls as per the site plan
2. Measure and cut the Ceiling Plate
3. Nail fix the Ceiling Plate through into the joists
4. Measure and cut the Sole Plate
5. Nail fix the Sole Plate ensuring they are plumb with the Ceiling Plate
6. Mark out the position of the Studs on both the Ceiling Plate & Sole Plate
7. Measure each stud and mark up in case of any variation
8. Skew nail each stud both top and bottom and check for vertical with the spirit level
9. Mark out the position for the horizontal noggins as per site plan
10. Nail fix the horizontal noggings
11. Measure and cut to size the interior door frames
12. Nail to stud frame ensuring frame is square and plumb
13. Ensure area is left safe at end of each shift
14. Remove all waste and dispose of as per local authority guidelines

## **First Fix Plumbing**

1. Check design plans to determine pipe runs locations, pipe sizes and specification.
2. Mark out and drill any access holes through brickwork ensuring clearance for insulation / fire stopping.
3. Mark out main manifolds runs to underside of floor joists using laser and mark joists centres.
4. Drill each joist through centre to suit pipe diameter ensuring clean holes.
5. Determine locations of stabs for take-offs for central heating and returns, similarly hot and cold water feeds.
6. Cut plastic tube sections and slide into place, connect Tees with click fit or adhesive as specification. (Glued fittings are to be made in compliance with pipe / adhesive manufacturer specification and procedure.)
7. Run plastic tube tee-offs in flexible / rigid tube as specification. (Flexible to be run as double for flow and return and connected ready to pressure test - flow to be indicated at each output.)
8. Clip and secure all pipework to prevent vibration.
9. Make temporary connections to close off pipework for pressure test.
10. Fill with water and pressurise. Check for leaks.
11. Pressurise to specified max pressure and close off for pressure drop test.
12. Release pressure and allow pipework to drain.
13. Remove all tools and excess materials.
14. Clear debris to designated waste skip
15. Hand over to client.

## **Fire Alarm System (Installation)**

1. Check design plan and specification
2. Check Asbestos Register if relevant
3. Assemble all equipment required
4. Carry out a visual inspection of all equipment
5. Check locations and cable routes for all fire alarm equipment
6. Check mounting surface materials for potential ACMs
7. Install specified cable to all locations and secure with metal P clips
8. Mount fire alarm detection equipment using appropriate proprietary fixings for each location
9. Mark out, prepare and mount fire alarm panel.
10. Terminate connections from all sensors / detectors / sirens / door actuators (if relevant)
11. Connect mains via MCB and key test switch, and battery to fire alarm panel
12. Programme fire panel
13. Isolate mains via key switch to test mains fail and test batteries
14. Test all detection equipment to ensure correct operation
15. Test all sounders on system to ensure correct operation
16. Handover and demonstrate system to customer

### **First Fix Electrical (Installation)**

1. All Staff and employees will observe the main contractor site rules for access and egress from the work site
2. Staff and employees will attend the safety induction course provided by the main contractor prior to starting work
3. Staff and Employees will be carrying out the relatively low risk operation of installation of cables and wiring for power supply sockets, lighting and swiching, security and data, for which they will require access to all areas of the building. It will be the responsibility of the Supervisor to liaise with the main contractor, regarding the safe access and work in areas where other contractors will be working
4. The Supervisor will also ensure other contractors are aware of the presence of staff in all areas.
5. All staff are experienced and have been trained in the use of any tools which they are required to use, where young and/or inexperienced workers are employed, it will be the responsibility of the Supervisor to ensure that these workers are supervised at all times
6. Staff are aware of the high numbers of injuries due to slips trips and falls and they will ensure that trailing cables, tools or debris do not cause a trip hazard to themselves and other contractors
7. Staff and employees will pay particular attention to good housekeeping and ensure that the site is left clean and tidy at the end of each shift.
8. Put on your personal protective equipment
9. Report to site office or main contractors site supervisor/foreman.
10. Take tools and equipment to the place of work and store away from the work area
11. Cordon off work area if practical to do so
12. Ensure the area to be worked and exit points are clear of obstruction and that safe access and egress is maintained
13. Check any electrical or hand tools for damage or faults, faulty or damaged tools must be removed from service immediately
14. Do not leave tools and equipment unattended at any time
15. Temporary task lighting to be available for use as necessary
16. Review house plan and establish location of main board, sockets, switches and lightingMark out sockets, switches and light fitting position on walls and floor joists
17. Position and fit pattress boxes.
18. Drill joists through centre to accommodate wiring (as necessary)
19. Run specified cables through from locations, ensure all cables are marked up as to their intended use at both board and socket / switch ends
20. Ensure all wiring is securely clipped in place
21. Position and fix cable sheath where necessary
22. Pack tools and equipment, remove excess cabling and fixings and leave area clean and tidy
23. Report to Client that work is complete, hand over.

### **Fit Exterior Door and Frame**

1. Ensure damp proof membrane is in correct position over inner and outer walls.
2. Test fit the timber frame and shave down if necessary
3. Fit the frame, check for level cill.
4. Cut the exterior cill notches allowing clearance for drip outside brickwork.
5. Centralise the frame and shim pack the frame in place in preparation for fixing.
6. Check for square and plumb in both axis. Ensure packers are in place at fixing points positions
7. Drill the fixing holes and screw fix with rawl plugs or frame fixings through timber, packings and brick / block work. Insert rawl plugs and secure with screws ensuring frame is not distorted.
8. Cut the interior sill to size and fix with propriety fixings.

Hang timber door

Mark out the door and frame for hinge mount rebates.

Use wood chisel or router and hinge jig to cut out hinge seats.

Mark out door for mortice lock and / or barrel lock.

Bore clearance holes for handle shaft and barrel lock as required

Mark out stile for mortice lock. Drill out and chisel faces to enable insertion of mortice lock checking alignment for handle shaft.

Fix hinges to door and check alignment with frame hinge seats.

Lift door into position and pack door to height to enable fixing.

Secure hinges to frame and check door for alignment within the frame.

Adjust by planing as required to enable soft close.

Insert mortice lock and lock plate, secure in position with screws.

Fit handle shaft and handles and secure.

Close door to frame and mark out for face plate.

Chisel rebate and fix face plate to jamb.

Close door and check flush closure into rebate.

Adjust face plate tongue if necessary.

Clear tools and sweep are of sawdust and chippings. Remove to waste skip.

Hand over to client

### **Fitting Loft Insulation**

1. Make way to the area where works are to be carried out.
2. Lay dust sheets to protect carpets and furniture as necessary.
3. Proceed to lay crawling boards for kneeling on to be able to lay insulation in a safe manner. Do not put any weight on top of plaster board ceiling.
4. Upon arrival of materials, unload the materials manually in a safe & orderly manner & move to the area where works are to be carried out.
5. Lay insulation under power cables so they remain visible until all work is completed.
6. Do not cover inset light fittings.
7. Lay the insulation between the joists where possible, and then a second layer at right angles to the first layer when it reaches the top of the joists (most joists will be less than 100 mm high).
8. Be careful not to block the eaves, as ventilation is essential to avoid condensation problems.
9. Make sure the loft hatch is also insulated. Clad with polythene sheet and secure with staples to prevent insulation break down when removing or fitting. Ensure good fit and draught proofed.
10. Remove all tools, packaging and waste
11. Remove crawling boards
12. Gather dust sheets carefully to shake out any mineral wool fibres outside.
13. Hand over to client.

### **Fitting of rigid insulation to timber floors, walls and ceiling space**

1. Set up a bench for the insulation to be cut on.
2. Measure the size of the insulation to be cut making sure this is a tight fit.
3. Place the insulated board on the bench and carefully mark out and cut to size either by hand saw or pad saw  
.Always cut in a well ventilated area and use the correct mask for this (FFP2) in compliance with Face Fit requirements.
4. Friction fit the insulation into the void and secure this with fixing either drywall screws / nails to stop it falling out this usually requires 4 no fixings per board and these are fixed slightly below the board and then insulation rested on these.
5. Check there are no projections and surfaces are ready for cladding finish.
6. Remove all tools and clear all off-cuts to designated waste skip for disposal or recycling.

### **Flat Roofing (New build)**

1. Site foreman will ensure site is safe to commence work
2. Signs and barriers erected to prevent unauthorised access
3. Staff and contractors will put on Personal Protective Equipment
4. Ensure that scaffold and access is safe to work on
5. Cut and position timbers as specification. Set sprags to seal from cavity.
6. Level and fix including all straps and hangers
7. Lay roof deck boards over timber supports and secure as specified. Ensure all edges are supported over joists.
8. Lay the venting layer; roll out the venting layer and apply heat from the gas torch to fix to board decking
9. Lay underlay on top of venting layer by rolling out, apply heat from the gas torch to fix underlay to venting layer
10. Lay capping sheet by rolling out, fix to underlay by application of heat using blow torch.
11. Form detail in capping sheet as per manufactures instructions
12. Fit new fascia
13. Fit new guttering and fall pipe in existing position
14. Drill and then screw the support brackets into the fascia
15. Lift the guttering into position and secure
16. Fit the fall pipes and secure to the wall with brackets
17. Check for quality of finish and water tightness
18. Fix plywood decking as specification ensuring integrity of roof seal remains.
19. Remove all waste and Inspect the site, ensure the site is left in a clean and tidy condition

### **Groundworks - digging trial pits**

1. The area of excavations will first be checked for live services using cat scanners and plans where possible. Any existing services will be protected or moved as required.
2. Erect suitable safety fencing around the area of the excavations.
3. Break out top slab surface using powered breaker to expose soft ground
4. Use hand tools to dig down to expose foundations
5. Keep all spoils within the barriered area
6. Following the inspection, back fill excavated area
7. If it is not possible to reinstate top surface, ensure that uneven surface warning signage is installed or hand over to client to undertake the same

### **Groundworks - Excavation of footings**

1. The work area is to be cordoned off and barriers erected to prevent unauthorised access.
2. Mark out area to be excavated in compliance with design plans, with marker paint
3. Check local area service plans and identify routes of gas, electric, water and telecoms.
4. Carry out CAT scans of ground to check and confirm live services.
5. Arrange for existing live services to be shutdown where possible
6. Bring heavy machinery onto site following safety procedures listed above
7. Excavators and other mobile plant to be operated only by trained personnel holding relevant certification.
8. Ensure trained banksman is available to manage excavation work and plant movement
9. Excavate ground as per contract drawings to required size and depth.
10. Spoil to be removed to designated storage area for re-use as required on site. Must not be stored within 2 metres of trench excavations
11. Where live services have been located machines must not dig within 0.5 meters
12. Hand dig around live services where necessary using spade and shovel.
13. Services to be supported securely to prevent damage or collapse during the works.
14. Live services may be capped off by the local authority / supplier as necessary.
15. Any services to remain live during the works MUST be identified and signs posted advising of LIVE.
16. Ensure that excavations are cordoned off with secure barriers
17. Excavations deeper than 1.2 metres must be shuttered, benched or battered to prevent collapse

18. Flooding must be controlled by pumping out as necessary.
19. Excavations must be inspected by a competent person prior to allowing personnel access to carry out any works.
20. All excavations must be left safe at the end of each shift

### **Hand Laying Tarmac**

1. Prepare area to be tarmaced, by cutting edges straight and making sure that the sub base is compacted by means of a whacker plate or whacker foot.
2. Edge seal the sides with bitumen
3. Place the bitmac and level off with rake ensuring raised level when compacted will align with surrounding existing levels.
4. Compact area with either whacker plate or roller
5. Sweep and clean area.

### **Install New Bathroom**

1. 1. Make good the walls by re-plaster and skim in preparation for decoration
2. Install water supply pipes and waste pipes to accept new sanitary ware. Ensure sufficient ventilation for working with solder and flux
3. Carry out any necessary work to ensure plumbing falls in line with current water and building regulations
4. A fire extinguisher to be close at hand during all hot work, heat pads protection to be used and inspection to all soldered areas in compliance with Hot Work Procedure immediately after and through rest of shift.
5. Install bath using assistance to lift and position. Connect taps ensuring correct handing.
6. Connect to waste pipe and check all fittings are secure. Adjust feet to level and secure to wall with brackets and proprietary fixings suitable for wall construction.
7. Prepare WC assembly.
8. Position and fit WC ensuring connection to soil pipe is correctly positioned and aligned. Secure cistern to wall and secure pan to floor.
9. Make up and fit cold water connection to cistern.
10. Prepare wash hand basin and pedestal, fit taps and drain fittings.
11. Mount in position and secure to wall.
12. Prepare hot and cold water supplies and make correct connections
13. Connect waste system.
14. Re-instate water supplies and check for leaks on all feeds and drains.
15. Check and adjust wc cistern valve cut off to correct level as necessary
16. Apply sealant to joints with adjacent wall surfaces around bath and wash hand basin, point and allow to dry.
17. Make up and fit plywood and timber boxing to conceal pipe work and prepare for tiling.

### **Installation of Arco Drain**

1. Cordon off the work area, place barriers to enclose excavation and prevent unauthorised access.
2. Mark out drain runs in compliance with design plan using spray marker paint
3. Measure and mark excavation edge lines
4. Carry out CAT scans of ground to check and locate live services. Mark locations.
5. Also Check area service plans.
6. Arrange for existing live services to be shutdown where possible. Make team aware if LIVE.
7. Cut the edges of hard standing with the hand held sthilt saw
8. Dig out ground as per contract drawings to required width and depth
9. Where live services have been located machines must not dig within 0.5 meters. Hand dig only.
10. Live services will be encased in concrete and capped off by the local authority
11. Mix and lay concrete to form the drain base.
12. Position ARCO channel sections, align and level.
13. Excavate suitable pipe trench to connect ARCO to existing surface water drain gully or Interceptor as design detail.
14. Back fill each side of channel using similar surface finish to match existing. Compact and finish level with adjacent surface.
15. Clear any debris from channel. Fit the Arco surface grills
16. All excavations must be left safe at the end of each shift
17. Clear area of tools and debris.
18. Remove signs and barriers and re-instate area use.

## **Installation of load bearing support lintel or RSJ**

1. Mark out location of new opening in wall.
2. Break out brickwork for installation of support padstones in compliance with structural engineer's specification. Ensure safe access to height using hop-ups or tower scaffold.
3. Install padstones on mortar bed, dry pack and point up, checking alignment and level. Check dimensions will accept the lintel / RSJ.
4. The wall above must be provided with temporary support to prevent collapse during installation of the lintel / beam
5. Prepare suitable openings above the lintel height to accept steel support pins to protrude each side of the wall. Alternatively use Strong Boy wall supports with acrows to one side only.
6. Check the floor structure for adequate strength, reinforce as necessary to prevent collapse in compliance with structural engineer specification.
7. Position acrows under support pins to each side and adjust to take weight of wall..
8. Carefully break out a slot between padstones to accept the lintel / RSJ.
9. Using adequate resource, the lintel is to be manhandled inside the acrow supports prior to lifting into position on the padstones. Suitable access to height must be in place to enable safe lifting to height. Alternatively use Genie Hoist or similar to transport and lift lintel or beam into position.
10. Lift the lintel into position, check level and height above floor and adjust as necessary with dry shim packing. Secure in place with a mortar mix.
11. Dry pack the clearance above the beam and point with mortar to secure brickwork above.
12. Carefully break out the opening brickwork from the top to prevent collapse and remove debris to waste skip.
13. Remove acrows and support pins
14. Make good brickwork to opening faces and pin openings.

## **Insulation of floors**

1. Take delivery of insulation and store and locate to designated areas of work.
2. Make sure floors to be insulated are clean and free from debris.
3. Where necessary lay a protective blinding layer as specified to prevent puncture damage to the DPM.
4. Lay the specified gauge Visqueen, overlapping joints and returning up walls to form a tank to above finished floor level .
5. Lay the insulation square with walls / area to be insulated and lay in a brick pattern to eliminate cracking.
6. Cut insulation where necessary to fit the tanked area, using a fine saw or sharp knife
7. If specified, add relevant mesh and spacers and / or 2nd layer of Visqueen .
8. On completion, clear area of tools and leave free of debris ready for the laying of the screed.
9. All waste to be transferred to designated waste skip or removed to yard for licensed disposal or recycling.

## **Kerbstone Laying**

### **Setting-out and Alignment**

1. Mark out line of kerbs
2. Insert pegs or steel pins to support string line
3. Set string line to correct level
4. After installation check line and level of laid kerbs
5. Make any necessary adjustments

### **Laying on a fresh concrete race**

1. Inform all other contractors/staff of start of works
2. Liaise with the client and other contractors to ensure safe operation.
3. Put on your personal protective equipment
4. Mark out line of kerb to be laid
5. Dig out to required depth
6. Lay a fresh race of ST1 support concrete to the excavation
7. Spread the concrete with a shovel leaving no high/low points
8. Ensure the concrete is the minimum specified thickness
9. Ensure concrete is wide enough to accept kerbs and Haunching
10. Fit haunch dowels into concrete at 900mm centres (Heavy Loading Areas)
11. Lay the kerbs on the concrete and offer to the string line
12. Adjust for line and level using a rubber mallet
13. Ensure it is level with the string line

14. Lay successive kerbstones and align
15. Continuously check kerbs for line and level
16. Leave a trowel thickness of 2-3mm between each kerb
17. Backing concrete to ST1 to be run behind the kerb line
18. Trowel the haunch into shape and leave to fully harden

### **Laying on a hardened race**

1. Inform all other contractors/staff of start of works
2. Liaise with the client and other contractors to ensure safe operation.
3. Put on your personal protective equipment
4. Ensure the area to be worked and exit points are clear of obstruction
5. Ensure that safe access and egress is maintained.
6. Mark out line of kerb to be laid
7. Dig out to required depth
8. Lay a fresh race of support concrete to the excavation
9. Ensure concrete is wide enough to accept kerbs and Haunching
10. Fit haunch dowels into concrete at 900mm centres OR
11. Cast Monolithic race and haunch in one block
12. Allow concrete to fully harden
13. Set up the pins and string line to the correct level
14. Use mechanical lifting aid to handle kerb stones where possible, e.g. kerb lifter with team handling or lifting attachment to JCB or 360 excavator.
15. Bed the kerbs onto the race with sand and cement mix
16. Adjust for line and level using a rubber mallet
17. Ensure it is level with the string line
18. Lay successive kerbstones and align
19. Continuously check kerbs for line and level
20. Leave a trowel thickness of 2-3mm between each kerb
21. Backing concrete to ST1 to be run behind the kerb line
22. Trowel the haunch into shape and leave to fully harden

### **Kitchen worktops**

1. Measure length of worktop and cut to size
2. Baton wall to accept worktop
3. Screw worktop from underside and secure to baton
4. If a mitre is required on the work top a jig will be used to form the mitre and a router cutter will be used to machine, the worktop will then be butt jointed with a thin sealant film to both faces and fixed from the underside using worktop clamps
5. After fitting the work top will be protected to avoid damage from other trades
6. Cutting of worktops will be done in a well ventilated area using dust extraction and containment attachments to power tools

### **Lay Concrete Base**

2. Mark out location of base in compliance with design plan
3. Check position of concrete base with clients representative.
4. Excavate area to depth specified and rough level.
5. Load out screened hardcore to specified depth and compact with whacker plate to level
6. Construct timber shuttering to provide internal dimensions as specified to form finished base
7. Lay 50 mm sand screed and rake level.
8. compact with whacker plate to level.
9. Lay specified DPM to cover entire surface and allow for turn up to above finished floor level.
10. Lay double layer of A142 steel reinforcing mesh with spacers below and in between. Tie mesh panels together with tie wire
11. Call clients representative to ensure that shuttering and reinforcing are in correct location.
12. Position concrete pump in close proximity to enable pump to deliver to whole area.
13. Confirm concrete quantity to be delivered to site and number of loads to ensure timing for continuous pour.
14. Discharge ready mixed concrete into rear of concrete pump.
15. Pour concrete via boom and nozzle over reinforcing mesh and level through.
16. Level concrete through with a vibrator poker to consolidate
17. Float trowel to a smooth finish as specification.
18. Leave area cordoned off to allow to cure.
19. Remove shuttering after a couple of days.
20. Clear site of all materials and waste

## Laying Flagstones

1. Public areas must be cordoned off to prevent unauthorised access to the work area in compliance with Chapter 8.
2. Mark out the base area as plan detail
3. Dig out to specified depth and remove spoil to skip for licensed disposal.
4. Backfill with crush and run to specified depth and compact the area with a Vibrating Whacker Plate.
5. Set any specified edgings on a concrete bed and haunch up to external face to provide support
6. Lay a bed of dry sand and rake level.
7. Lay each flag and lightly tap down to ensure fully bedded and level with adjacent flags to specified height.
8. Mark and cut flags as necessary using Stihl saw or similar, ensuring protection from dust and flying debris for self and others who may be affected.
9. Dress the gaps between flags with fine silica sand.
10. Sweep clear and remove any debris created by the task.
11. Remove all tools and excess materials to truck.
12. Remove all barriers and re-instate area

## Painting

1. Cover floor area and any furniture etc with dust sheets to prevent paint splashes.
2. Apply masking tape as necessary to protect any adjoining surfaces from splashes or spills
3. Prepare surfaces to be painted by sanding /stripping and cleaning
4. If using chemical stripping agents such as Nitromors, you must read and understand the COSHH Assessment for the product you are using.
5. Ensure adequate natural ventilation to remove fumes
6. Electric hot air stripping tools are PAT tested on an annual basis and checked for defects prior to use on a daily basis, damaged or defective tools will be removed from service immediately
7. Electric hot air strippers can get extremely hot and therefore create a fire risk, ensure a suitable fire extinguisher is at hand during hot work
8. N.B. Chemical cleaners and work tools such as hot air strippers will not be left unattended in residential properties, this is especially important where children are present
9. Make sure any extension leads are kept tidy and do not cause a trip hazard.
10. Power supplies must be 240 / 110 transformer or 240 volt protected by RCD at socket outlet or distribution breaker.
11. Prepare all woodwork for painting by sanding down (ensure a face mask EN 149 FFP2 is worn)
12. Fill all holes cracks with good quality filler, always follow the manufacturers guidelines
13. Rub down any excess filler to leave a good finish
14. Clean down surface to be painted using proprietary cleaner as per instructions above
15. Ensure surface is clean, dry and free from dirt, grease, and oil
16. When working from stepladders/step ups the appropriate procedure must be followed
17. Prepare paint for application. i.e. mixing etc
18. Apply emulsion paint with brush or roller and allow to dry, do not apply too much and watch for runs etc
19. Check first coat for even coverage and allow to dry
20. Apply second coat as specified and allow to dry
21. Ensure suitable ventilation when using oil based paints
22. Do not leave paints open and unattended at any time
23. Apply undercoat / primer to the woodwork and allow to dry, do not apply too much and watch for runs etc
24. Check undercoat for correct adhesion to surface. lightly de-nib and clean down
25. Apply gloss finish coat and allow to dry. De-nib, clean down and apply 2nd coat if specified.
26. All items must be thoroughly cleaned in either water or brush cleaner at the end of each shift
27. Items such as brushes and rollers should be air dried and stored
28. Wash buckets, wipe inside and out and store upside down
29. All items should be stored out of reach of tenants and children
30. On completion of works, remove all masking tape for disposal. Carefully remove all protective covers from the premises for cleaning or disposal.
31. Remove all equipment / tools, vacuum work area and leave premises tidy
32. Hand over to client

## Partition Fixing and Erection - Timber Stud

1. Put on your personal protective equipment
2. Ensure the area to be worked and exit points are clear of obstruction and that safe access and egress is maintained
3. Mark out partition positions in compliance with plan detail.
4. Mark out position of doors, openings, glazed units etc
5. Position timber base rails and fix to floor with proprietary fixings.
6. Set laser line to ceiling, position and fix top rails.
7. Cut to length and position timber studs at 400 mm ctrs and nail / screw into base and top rails.
8. Set out any internal window frame locations by modifying openings to suit plan
9. Cut and fit noggins between studs.
10. Cut and fit noggins for mounting pattress boxes and radiator mountings etc.
11. Position and fix door frames
12. Position and fix plasterboard to one side of all partitions.
13. Plasterboard to be measured and cut with sharp knife, broken and internal bend cut to enable end of run to be fixed.
14. All services to be installed as plan by Others.
15. Install mineral fibre insulation prior to fitting plasterboard to other side
16. Remove all debris to designated waste disposal area
17. Do not leave tools and equipment unattended at any time
18. Ensure area is left safe at end of each shift

## Plastering - Full Plaster

1. If appropriate inform the main contractor representative of start of works
2. Ensure the area to be worked has been clearly signed and marked out with warning tape; if necessary erect physical barriers to prevent unauthorized access
3. Put on your personal protective equipment
4. Prepare safe access to height as necessary, e.g. zip scaffold tower, MEWP, step-up
5. Ensure intensity and direction of lighting is suitable to enable a visual satisfactory finish appearance.
6. Prepare the area to be plastered removing any loose material, ensure the surface to be plastered is clean and free of dust
7. Apply PVA bonding coat where appropriate and allow to dry
8. Collect the required materials from the storage area; ensure that you follow good manual handling techniques for heavy material such as 25kg plaster bags
9. Do not leave tools and equipment unattended at any time
10. Fit specified angle beads to corners and window reveals ensuring square and true in all planes
11. Mix hand trowelled gypsum by mechanical paddle using a clean container, ensure all material in a batch is mixed thoroughly
12. Ensure that dust is kept to a minimum during mixing and that mixing is carried out in a well ventilated area. Wear EN 149 FFP2 dust mask to prevent inhalation of gypsum dust.
13. Apply a base coat to the designated areas as per work instructions. Finish with a notched trowel to provide a key for the finish coat. Allow to dry out
14. Apply a 3 mm skim coat following the procedures defined above
15. Smooth with a steel float trowel ensuring a flat even surface to a fine finish suitable for decoration.
16. Do not attempt to use any mix after initial set, and do not attempt to re-temper, discard all such mix immediately
17. Do not attempt to plaster where extremes of temperature or moisture will affect the finish
18. Remove all access system equipment.
19. Remove all debris to designated area / skip, leave area clean and tidy

## Pouring concrete foundations

1. The footings are to be checked and pumped clear of excess water.
2. Guide pins to be inserted to give indication of concrete depth to ensure even levels
3. A safe access route is to be prepared for the pump wagon to gain close proximity to the foundations area
4. Personnel involved with the pour will all wear full PPE to include industrial wellingtons and over-leggings with gaiters to prevent wet concrete entering boots.
5. The pump will deliver specified concrete mix by hydraulic boom to the footing runs in turn. Depth to be by guide markers.
6. Concrete is to be consolidated by use of vibration poker and levels checked using dumpy.
7. Surface finish to be checked and smoothed if necessary.
8. Pump is to be cleaned down prior to leaving site
9. Once poured the area will be barriered off to ensure safe whilst the concrete cures.
10. All tools to be cleaned off and returned to secure storage.

## Preparing an insulated concrete base slab

1. Using the dumpy level a level will be taken and crushed stone hardcore will be spread to the required depth.
2. Hard core is to be compacted by whacker plate or vibration roller to form a level base at the specified height
3. Once achieved a 50 mm layer of sand is laid over the area and leveled.
4. Visqueen is then laid across the whole area and taped and lapped.
5. Insulation is lifted and laid across the whole area, boards are butted together and taped. Take care not to damage the insulation.
6. Lay specified reinforcing mesh fitted with suitable proprietary spacers to cover the area & tie using mesh ties.

## Scaffold Erection & Dismantling

All scaffolding must be erected by trained or supervised operatives. Scaffold may be Tube and Fittings or System Scaffold.

Standard scaffold (basic structures) may be constructed in compliance with TG 20 (latest version)  
Scaffold structures outside the remit of TG 20 volume 1 will require a design plan approved by a structural engineer.

System Scaffold must be constructed in compliance with manufacturer specification

Tube and Fittings scaffold

1. The delivery vehicle will be parked as close as practicable to minimise the distance needed to carry the scaffold sections
2. The site will be inspected to ensure that the ground is capable of taking the weight of the scaffold, and that there are no voids etc.
3. The site will be fenced or cordoned off to prevent unauthorised access during construction and notices posted advising of "Construction Works in Progress - Do Not Enter area".
4. Where the structure is over a public area or close to the highway, licenses must be obtained from the local authority.
5. Additional protection measures as specified by local authority must be complied with to prevent injury or collision.
6. Any access points will be noted and kept clear where practically possible.
7. Dependant on the type of scaffold being erected (if not free standing) it will be tied into the building at specified intervals.
8. Scaffold will be erected in accordance with TG 20 and SG4.
9. Scaffolders must prepare safe temporary access at each lift and use the advance guard rail system or body harness and lanyard attached to fixed horizontal rails when working above 3 metres height.
10. Access ladders will be blocked off when the scaffold is incomplete or not ready for use.
11. Warning signs will be posted when the scaffold is incomplete. Where a Scaf-Tag system is employed, the appropriate card will be displayed.
12. The scaffold will be signed off and a certificate issued when the scaffold is ready for use.
13. A weekly inspection by competent person will be made to ensure the security of the scaffold. Scaf-tag to be completed where applicable.
14. Prior to dismantling, where applicable e.g public areas, the area must be closed off to prevent unauthorised access into the work area.
15. Dismantling will start from the top level and scaffold sections will be passed down manually to the levels below by team lifting.
16. Scaffolders working on partially dismantled levels will wear full body harness and lanyard attached to horizontal rails above and retain single boards below, working backwards to downloading point.
17. All connection pieces will be passed (not thrown) and collected in buckets or other suitable receptacles.
18. All sections will be loaded and secured on the lorry for removal from site.

## Second Fix Electrical (Installation)

All works to be carried out in compliance with BS 7671 and IEE 17th edition

1. Temporary task lighting to be available for use as necessary
2. Mark out position of Distribution Board on wall and drill and plug wall.
3. Mark out and drill suitable hole to feed Mains Tails to meter box.
4. Fit main panel and feed through all cables for all circuits.
5. Strip back outer insulations to enable individual cables to be routed to appropriate breakers.
6. Strip back inner insulation and connect power side into identified breaker connector.

7. Connect Neutrals into common connector block.
8. Connect Earths into Earth connector block.
9. Ensure all wires are tidy and clear of buss bars. Secure with tie wraps.
10. Sockets – Trim cables back to suitable length for stripping and connecting to socket terminals.
11. Ensure grommets are fitted into pattress back boxes.
12. Fit insulation sleeves to earth wires.
13. Connect to pattress earth terminal and secure.
14. Position socket, fix and secure screws ensuring level alignment
15. Light switches - Trim cables back to suitable length for stripping and connecting to switch terminals. Ensure grommets are fitted into pattress back boxes. Fit insulation sleeves to earth wires. Connect to pattress earth terminal and secure.
16. Lighting – Strip back cabling to enable connection of wires to ceiling rose junction box.
17. Mount ceiling rose and secure to ceiling joist. Fit lamp socket and tail and secure rose cover.
18. Test all circuits for continuity and correct switching.
19. Tidy any cables in trunking and fit trunking covers.
20. Test all circuits for continuity and switching
21. Prepare new Mains and Earth Tails, thread through to meter box leaving adequate length for connection. Connect into Distribution board terminals.
22. Fit Distribution board cover.
23. Pack tools and equipment, remove all waste to designated skip and leave area clean and tidy
24. Report to Client that work is complete and ready for connection by power supplier.

## **Second Fix Joinery**

### **FITTING INTERNAL DOORS**

1. Cut off the horns
2. Dry test the door in the casing and mark where trimming is needed
3. Trim the door to size, allow a clearance
4. Wedge the door in place and mark out the hinges and lock position
5. Chop out and fit the hinges to the frame either by hand or router
6. Chop out the door hinges by hand or router
7. Hang the door and check for plumb and correct clearance
8. Drill & chop out the door before fitting the lock
9. Fit the handles
10. Mark out the frame and fit the striking plate
11. Test the door for correct operation

### **FITTING THE ARCHITRAVE**

1. Measure the lengths of architrave required
2. Check to ensure lengths are not bowed or twisted
3. Cut to size with a mitre using the chop saw
4. Fix the architrave to the door frame using the nail gun
5. Check mitre joints ensure top moulding is level

### **FITTING SKIRTING BOARDS**

1. Measure the length of skirting required
2. Check to ensure lengths are not bowed or twisted
3. Dry test fit and cut/plane to size if required
4. Fix to the wall by nail gun / screw & plug or instant grip adhesive as required
5. Cut scribed joint or mitred joint as required
6. Check all joints and fixings

### **BALUSTRADES AND HANDRAILS**

1. Measure / cut and fix the newel posts ensuring each is upright
2. Measure the run of the base/hand rail and cut to size with the chop saw
3. Fix the base rail to the string
4. Fix the hand rail with the supplied fittings
5. Measure the angle of the balusters and mark out the position on the base rail and handrail
6. Cut the balusters to size and fix to the base rail and hand rail
7. Test the rail to ensure it is secure

### **KITCHEN UNITS**

1. Check all units for sign of damage

2. Mark out the floor with the position of the units and equipment
3. Assemble each unit as per manufacturers instructions
4. Heavy or awkward items should be tandem lifted
5. Fix the units in place with the appropriate fixings, ensure units are levelled up correctly
6. Measure and cut (if required) the worktop
7. Dry fit and adjust where necessary
8. Fix the worktop using the appropriate fixings
9. Mark out the wall for the position of the wall units
10. Mark a plumb line at the correct height for the underside of the units
11. Drill and subsequently fix the adjustable brackets to the wall
12. Hang fix each unit and adjust as necessary
13. Measure / cut and fix the cornice (if required)
14. Fix the shelves
15. Hang all doors and adjust as necessary
16. Fit the plinth
17. Fix any additional accessories (if required)
18. Remove all tools and equipment from site
19. Recycle as much waste as possible

## **Second Fix Plumbing - Sanitary Wear, Sinks And Radiators**

### **Fitting Sanitary Wear**

1. Mark out the position of all sanitary wear.
2. Fit the bath or shower base as per the manufacturer instruction. Ensure feet are mounted on robust floor, or add pattrass blocks. Secure to wall using suitable proprietary fixings
3. Drill, plug and fix the supports for the sink, toilet and bidet (if applicable) using suitable proprietary fixings.
4. Fit the sink and bidet (if applicable.)
5. Fabricate and install waste pipes and traps
6. Where a plastic pipe is connected with solvents, staff will follow all safe use instructions.
7. Connect the waste pipes to traps and check for leaks.
8. Position wc and connect to soil pipe ensuring seal is aligned correctly.
9. Make up plastic pipework and connect to hot and cold water feeds.
10. Where water feeds are made up in copper, care must be taken to prevent fire during hotwork.
11. Ensure the correct type of fire extinguisher is on hand during hot work.
12. Protect surrounding area with heat shields.
13. Ensure adequate natural ventilation to remove fume during solder work.
14. Prepare all fittings, apply flux, connect and solder all joints.
15. Fit the shower enclosure as per the manufacturer instruction.
16. Seal around the sanitary wear with white or clear mastic as specification.
17. Drill, plug and fix any accessories.
18. Ensure all plugs, handles taps and other ancillaries are correctly fitted to sanitary ware.
19. Test for correct operation including wc cistern capacity, float valve adjustment, flushing of toilet and emptying of water through plugs and overflows.
20. Visually inspect pipe work and joints for leaks and damage both internally and externally.

### **Fitting A Kitchen Or Utility Sink**

1. Use all equipment according to manufacturers instruction and perform a visual check.
2. Ensure correct PPE is worn.
3. Mark out the position of the sink on the worktop. (Check for interference with carcass panels and bracings, adjust as necessary)
4. Drill and jigsaw out the void for the sink (if necessary.)
5. Test fit the sink. Dress the apperture timber face and seal with lacquer to prevent water ingress.
6. Fit the sink and secure with clips provided.
7. Connect the trap, waste, hot and cold feeds.
8. Where a plastic pipe is connected with solvents, staff will follow all safe use instructions.
9. Where copper pipework has been installed take care to prevent fire during hot work.
10. Ensure the correct type of fire extinguisher is on hand during hot work.
11. Protect surrounding area with heat shields.
12. Ensure adequate natural ventilation to remove fume during solder work.
13. Prepare all fittings, apply flux, connect and solder all joints.
14. Seal around the sink ware with clear mastic to work top surface.
15. Test for correct operation, i.e. HOT (left), COLD (Right)
16. Visually inspect pipe work and joints for leaks and damage.

## Fitting Radiators

1. Deliver radiator, fittings and sealant tape plus appropriate tools to working area, using safe manual handling techniques and ensuring safe access and egress.
2. Measure up wall for radiator brackets and mark out.
3. Cat scan the walls for live services.
4. Inspect all tools for damage etc prior to use
5. Protect floor area from dust created while drilling.
6. Wear correct PPE as specified
7. If no live services found drill wall, install proprietary fixings and mount brackets.
8. Screw brackets into place.
9. Prepare radiator valves, bleed valve and plug using PTFE tape to seal threads and secure.
10. Mount radiator onto the brackets.
11. Once piping is installed offer up pipe to valves and tighten.
12. Complete installation of all radiators and check sytem is connected.
13. Fill with water and pressurise
14. Bleed all radiators.
15. Visually inspect system pipe work and joints for leaks and damage.
16. Flush and drain system prior to refill with inhibitor
17. Reinstate / commission system.

## Tarmac Laying Using Machine

1. Put on appropriate PPE
2. Unload machine from wagon
3. Use banksman for all reversing and laying activities
4. Carry out daily oil and coolant checks
5. Check tyre pressures
6. Start machine and set to heat up
7. Manoeuvre machine to the tipper, and fill machine with hot tarmac
8. Ensure all covers and guards are in place while tipping in
9. Manoeuvre vehicle to start of tarmac run using guide and banksman
10. Commence tarmac run, ensure tarmac is no thicker than 160mm
11. Complete run
12. Paint edges of tarmac with cold seal
13. Clean and empty tarmac machine
14. Return machinery to wagon

## Tiling

1. Cover floor area and any furniture/fittings to prevent damage to goods
2. Clean down walls using proprietary cleaner
3. N.B. Chemical cleaners and work tools such as hot air strippers will not be left unattended in residential properties, this is especially important where children are present
4. Ensure wall is structurally stable, flat, and consists of a suitable substrate
5. Score the entire surface area to provide a key for adhesive
6. Ensure wall is clean dry and free from dust and contaminants
7. Remove all debris and waste to designated waste disposal area
8. Ensure correct adhesive for type of tiles being applied, if necessary consult tile supplier
9. When doing full walls, shower enclosures etc hang a plumb line and mark to ensure level and vertical alignment of finished tiles.
10. Mix sufficient adhesive to cover desired application area and apply to wall using flat side of trowel
11. Comb the adhesive to a uniform depth using the notched side of trowel
12. Fit spacers to top of sinks, shower trays etc to allow 3mm
13. Fix first run of tiles ensuring level and plumb
14. Fit spacers between tiles
15. Firmly press tiles in place
16. Tiles will be cut where necessary using proprietary cutting tools. Notched, curved or quarter round cuts will be done with a wet saw
17. Wipe off excessive adhesive with clean damp sponge
18. Remove all waste and debris from site to designated area, site will be left clean and tidy at the end of each shift

19. Allow adhesive to cure for 24 hours

#### Grouting

1. Ensure floor area and any fittings are covered to prevent damage
2. Mix sufficient grout to cover a workable area, refer to manufacturers instructions
4. Using grout float spread grout into joints
5. Make sure all joints are filled using squeegee blade to remove excess grout
6. Allow grout to set for 20 minutes then wipe residue off with damp sponge cleaned regularly
7. Minimal clean-up water should be used to ensure proper grout curing and maintain colour uniformity
8. Shape grout joints with grout tool
9. Buff tiles with clean cloth

#### **UPVC Door Installation**

Put on personal protective equipment.

Ensure work area is clear of obstruction, furniture and any floor coverings are either removed or adequately covered to prevent damage.

Check opening size is correct and will accept the new frame.

Remove the old door from the frame and remove from work area.

Release the timber frame and carefully remove from the brickwork opening, taking care to not damage the internal plaster finish.

Insert the new upvc door frame into the opening and check alignment for secure fixings. If necessary, attach extension brackets to enable secure fixing by drilling and plugging brickwork.

Prepare the new cill, notching out to ensure specified overhang above brickwork. Fix to base of door frame

Centralise the door frame within the opening and pack with suitable shims to ensure level and plumb in all planes. Secure in position with screws through frame or brackets as necessary.

Check to ensure no distortion of frame.

Introduce the door into the frame and mount on preset hinges.

Check hinges and adjust as necessary to ensure door is central in both directions.

Fit door furniture, and check operation.

Check operation of bolts system and catch adjustment.

Remove any film protection from upvc surfaces.

Seal gaps between frame and brickwork. Finish with silicone mastic sealant to specified colour and point to provide smooth bead finish to sides, top and cill.

Clear all tools and surplus materials.

Remove all waste to designated disposal point or load into van for licensed disposal or recycling.

Remove any protection used during works.

Hand over to Client and confirm acceptance

#### **Waste chute on construction site.**

1. Put on your personal protective equipment

2. Ensure that the chute has been secured to the scaffold at the top end at a convenient height for loading waste.
3. Ensure that barrier protection is in place at the loading point to prevent falling into the chute.
4. If the chute is not at the end of a scaffold deck, it must not obstruct access or egress along the deck.
5. Carry out daily checks to ensure that each section of the chute is secure and clear of debris blockages.
6. Ensure that the final piece of the chute is directed into a suitable skip.
7. Ensure that an appropriate cover is secured over the skip and chute end to prevent bounce out and dust escape.
8. Establish barriers to prevent general access to the skip area.
9. Leave site in safe condition at all times.

### **Brick and Blockwork**

1. Check level and alignment of foundation to ensure walls will be level and plumb
2. Position blocks/Stones work near work area using site crane or fork lift truck
3. Have mortar in tubs transported to suitable location for loading out to spot boards
4. Crane or telehandler to lift mortar tubs into position
5. Set out and check correct alignment in accordance with plans and orientation.
6. Lay Blockwork and brick to just below specified ground level
7. Lay outer brick / stonework to DPC level and install closed cavity DPC as specification
8. Set out openings for door frames and windows.
9. Plan brick / stonework to ensure satisfactory alignment and appearance.
10. Build walls up to level and arrange scaffold lifts installation
11. Ensure all settings are level and plumb
12. Scaffold access lifts will be built up as the height increases
13. At first floor level. floor joists are to be set out and secured within inner blockwork.
14. Temporary flooring must be installed before allowing work above 1st / 2nd floor / roof level.
15. Ensure all working lifts are fully compliant with Work at Height regulations.
16. Ensure access to height is closed off at end of each day, and site is secured at perimeter.

### **PAT Testing**

1. Turn off Appliance. (Check it is safe / ok to do so, in the case of computers, phone systems, life support machines! etc.)
2. Unplug / Disconnect Appliance
3. Visual Check of Appliance including Plug (correct fuse etc) and flex
4. Test using Portable Appliance Tester
5. Results stored on Hard drive of Portable Appliance Tester
6. Label Appliance (for Identification and next test due)
7. Reconnect Appliance if Pass Results Obtained
8. Remove Plug / leave disconnected if fail result found. Mark FAIL DO NOT USE!
9. Repeat process for all Appliances on site
10. Download and Print Results off site
11. Post to Client

### **Brickwork cleaning with Acid**

1. Specified PPE to be worn by all staff to include Plastic face shield, acid resistant gloves, acid resistant overalls etc.
2. Suitable safe access to height arrangements to be in place as required. Do not work off ladders, a stable access platform must be used when working at height.
3. Dilute the acid to the manufacturers recommendations
4. Transport to the working site in sealed acid resistant containers
5. Pour a small quantity into a plastic bucket
6. Working in small areas approx 3 - 4 m2, apply the solution to the stone/brick wall
7. Use a block-brush to apply the solution to the wall

8. Work the solution into the brick or stonework and allow to react for 15 minutes. Do not allow to dry out.
9. Rinse off using a water hose and clean brush.
10. Contain run off to prevent running into drains or surface water courses. Absorb in suitable spill media and collect for safe disposal or neutralise with milk of lime.
11. Check area for adequate clean.
12. If necessary treat again using a stronger solution.
13. All chemicals will be used in accordance with COSHH assessments
14. Ensure solution is disposed of correctly.

