ALLARD CONSTRUCTION

Allard Construction Limited Established since 1957
Unit 13, Maple Park, Essex Road, Hoddesdon, Hertfordshire EN11 0EX
T 01992 463090 F 01992 440798
E info@allardconstruction.co.uk W www.allardconstruction.co.uk

# Method Statements
# Risk and COSHH Assessments

For (The Client);

**Peldon Rose Ltd.**

At;

**16 Great James Street**

**Our Ref: X7287**

**Proposed Start Date: T.B.C.**
**Proposed Completion: T.B.C.**

**Prepared for and on behalf of Allard Construction Ltd. by;**

**Aaron Chapman**
**General Manager**

**Date Created: 01.09.2015**

Signature:_____

## Table of Contents

# SITE SPECIFIC METHOD STATEMENTS

| General Statement of Works | |
|---|---|
| Brief description of work: | Removal and replacement of asphalt roof covering and associated building works. |
| Sequence of work including control measures:<br><br>Place of work: ( location on site or in building )<br><br>Access / Egress:<br><br>Permit to work required: | 1. Take up existing roofing and clear from site.<br>2. Knock down skirting and clear from site.<br>3. Cut new chases.<br>4. Supply and install insulated Permaphalt asphalt system to horizontal surfaces with solar reflective finish.<br>5. Ditto to upstands but uninsulated.<br>6. Dress asphalt to all RWO's, internal upstands and SVP's the like.<br>7. Remove asphalt to water tank and renew with solar reflective finish.<br>8. Re-pointing brickwork,<br>9. Painting windows, window cills, ground floor railings & front entrance<br>10. Minor repair works to entrance tiling<br>11. Replacing a small pane of glass to a shash window<br>12. Scaffolding.<br>13. Hoisting facilities<br><br>External to main roofs.<br><br>By scaffolding and access ladders contracted in by ourselves.<br><br>By official order from Peldon Rose Ltd. |
| Site and works supervision:<br>(Identity of person in overall charge and detail their responsibilities). | The Site Foreman will be inducted by the Contracts Manager before starting works.<br>The Site Forman is responsible for all site safety and the implementation of safety systems and the induction of all operatives and visitors etc. before they go onto site, and is also responsible for ensuring that all site personnel and visitors comply with all safe systems of work / attendance on site.<br>The clients on site management are to confirm that sufficient air intake units are turned off before starting any liquid applied works. |
| Assessments:<br>(Risk, Noise, Manual Handling, COSHH) | Assessments have been completed and are recorded below and this document will remain on site during the full term of the works as a "living document".<br>All operatives concerned will be instructed, inducted and monitored by the Site Foreman in the safe working practices detailed in this document. |

| | |
|---|---|
| Plant and equipment to be used and operator training required.<br>(List major items of equipment, identify statutory tests / examinations, identify training required for operatives). | See risk assessment control measures for specific equipment requirements and its safe use and handling. All operatives concerned will have been instructed and qualified in plants safe handling operation. Only trained and competent operatives will operate specialist tools and equipment. |
| Safety of third party, identify works, which may present a risk to third parties and detail control measures. | Construction sites are inherently hazardous to all site workers, visitors and passers by. See risk assessment control measures identifying the safe system of work. |
| Environmental controls and waste disposal procedures: | All waste will be placed in suitable waste skips for disposal at a registered site by a registered waste conveyor. |
| Special PPE requirement: | See risk and COSHH assessment control measures for specific PPE requirements itemised by product type, handling and application. |
| Emergency procedures:<br>Does the work require additional emergency procedures above those in effect? | No, however our procedures will comply and compliment the Clients own emergency procedures on site, as specified during the initial site induction from the Client. |

**FOR THE WORKS AS DETAILED ABOVE;**

**Contacts;**

**Contract Manager:** T.B.C. **Contact No:** T.B.C.

# SITE SPECIFIC RISK ASSESSMENTS

**All Persons Exposed:** Operatives, Client's personnel, visitors and the general public.

**Non-routine Operations:**
The risk assessments below are for the anticipated normal routine work operations as described in the "Brief description of work" in the method statement above. Non-routine operations have not been planned for and should they arise further assessments for them must be completed and recorded in writing in this document before they are allowed to commence. These assessments must be made by, or brought to the attention of, the Health and Safety Division before such work is allowed to commence.

**Period of Validity:**
These risk assessments are valid for the time period of the job above, loosely as shown by the "Proposed Start Date" and "Proposed Completion" date (or period) shown on page 1, but for a maximum of period of 1 year in any one contract. Although a living document and intended to be constantly reviewed and revised, after 1 year in any one use, the Health and Safety Division must review the entire plan in its entirety in order for it to remain valid on site.

**Site-Specific (non-generic) Use:**
This document and its contents whilst "worked-up" from a generic master document, is site-specific to the contract stated above only, and is not to be used as a generic document for any other contract or job, no matter how similar in nature.

**USE OF THE RISK ASSESSMENTS BELOW IS TO BE AS FOLLOWS;**

**Risk Exposure and Consequence;**

**Likelihood** is rated with the listed control measures being in place and strictly adhered to.
**Consequent severity** is as if an accident occurs despite the control measures being in place.
**Residual risk** is considered and assessed by thoughtful comparison with the points summery below.

For example;

| Likelihood | | X | Severity | | = | Residual Risk |
|---|---|---|---|---|---|---|
| Highly Unlikely | 1 | | Slightly Harmful | 1 | | |
| Unlikely | 2 | ☒ | Harmful | 2 | ☒ | 4 |
| Likely | 3 | | Extremely Harmful | 3 | | |

**Points Summary**:

Total **2** to **4** = Proceed Carefully whilst strictly following the adopted control measures.
**Total Over 4 = STOP! Do not even start work.** Re-assess and amend the method / works to reduce risks.

| **Hazard:** | Falling from height | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

Provide suitable access scaffolding and / or protective double or triple guard-rail (as required) to all working areas. The top handrail must be at least 1100mm in height above the platform deck and have no more than 470mm between handrail ledgers.
Cordon off area below work area; provide scaffold fans over any doorways affected by our works.
Structural scaffolding alterations are only to be made by the scaffolding companies' operatives.
Provide good and sufficient warning signage i.e. "Keep Out", "Men Working Overhead", etc.
Check all ladders for cleanliness, suitability, strength and integrity, and for correct positioning and security of fixing (i.e. tied or clamped at top, 1:4 angle against wall and braced at the feet).
Materials are to be raised to the roof by hoist provided, not carried up on ladders.
Only one person to be on any one ladder at a time, all other persons are to wait their turn and stand clear of the bottom of the ladder (not directly below the person above).

| **Hazard:** | Falling debris | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

Provide suitable access scaffolding and / or protective guard-rail to all working areas including suitable toe-boards where no other edge protection is present (parapet wall etc.) and where practicable to allow for the works being carried out.
Cordon off area below work area, provide scaffold fans over any doorways affected by our works. Double board with plastic sheeting in between any working lifts above public walkways.
Provide good and sufficient warning signage i.e. "Keep Out", "Men Working Overhead", etc.
Tools and materials are not to be left lying on top of any area or parapet wall etc. where there is a risk of them being knocked off onto persons or property below.
Do not move heavy or awkward objects at height, where others persons are present below.
When working on roof edges with no toe-boards present above vacant areas, all works will stop the instant should any person enter the vacant area below, and will not recommence until it is once again vacated and safe to continue working.
Hard hats are to be worn on site at ground level and on the scaffolding levels at all times, but are not required on roof level as long as there are absolutely no head injury hazards present.
Materials are to be raised to the roof by hoist provided, not carried up on ladders.
Only one person to be on any one ladder at a time, all other persons are to wait their turn and stand clear of the bottom of the ladder (not directly below the person above).

| **Hazard:** | Slips, trips and falls | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

Maintain a clean, tidy well organised site at all times as far as is reasonably practical.
Walkways, stairs, steps and ladders are to be kept clear of all hazards and slippery substances such as mud, grease, oil, etc.
Prevent cables, ropes etc. from trailing across walkways and especially stairs, steps or ladders. Keep all cables tidy on site at all times, when finished using a rope or cable, clear it away to storage immediately.
Operatives are not to carry large unwieldy materials on their own, assistance must be sought. When several operatives are moving large unwieldy materials, the route to be taken is to be identified and any special hazards such as steps, pointed out to all present before the operation commences.
Do not use electrical cables or tools requiring cables in wet conditions, or allow cables to trail through ponded areas.

| **Hazard:** | Hot works | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

Appropriate powder and/or $CO^2$, checked and ticketed fire extinguishers must be on site and be easily available, i.e.; one within at least 3.0 metres at each point where hot work operations are being carried out.
Operatives are to remain on site for at least 60 minutes after completing hot works and extinguishing all lights, to check for signs of combustion and ensure the cooling down of the area worked on.
A hot works permit system is to be used on this site and its control measures rigidly adhered to at all times.

| **Hazard:** | Fire | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

Before starting work, agree suitable fire actions to be taken on site by the operatives and in the building with the occupiers and also any other persons on site. Two-way communication by all parties is essential.
Identify suitable fire escape routes from all areas to be worked in, once identified these must not be obstructed by materials, rubbish or plant at any time.
No smoking, naked flames, heaters or other sources of ignition are to be present during the application of any highly flammable products, and precautions must be taken to protect against inadvertent ignition from passers by (if present).

| **Hazard:** | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|
| Gas bottles and/or equipment | 1 | 3 | **3** |

**Control Measures:**

All gas bottles must be removed from site at the end of each day, or stored and secured on-site in gas cage at ground level.
No acetylene gas bottles are ever to be left on site over-night, they must be removed.
Never use a gas bottle missing its valve guard (steel guard at the top surrounding the valve). Call the manufacturer's emergency services number for them to come and collect it via their own special transporters.
All gas leads, valves connectors and equipment are to be checked at the beginning of each day for wear and tear, cuts, splits, holes, fraying and general condition etc. and any faulty items must not be used but must be immediately rendered unusable (destroyed), disposed of from site and replaced with new.
Appropriate, checked and ticketed powder and/or $CO^2$ fire extinguishers must be on site and be easily available as follows; one at each point where hot work operations are being carried out, one at least 3.0 metres away from where any gas pot or boiler is in use, and one where the gas bottles are being stored and if this is a cage, then the extinguisher must be outside the cage, NOT locked up inside it.
Burning gas should not be extinguished unless the gas flow can be cut off immediately - it is usually safer to leave flammable gas burning than to risk building up an explosive mixture of gas and air or risking a "blow-back" and a bottle fire.
NOTE – fire extinguishers are not the best way to put out a gas bottle or pressurised gas fire. If it is safe to do so and the bottle valve is intact and in good working order, turn it off (whilst protecting your hand from fire), otherwise use an extinguisher, constantly check bottles for heat afterwards and if found to be hot evacuate immediately, call on all others to evacuate, cordon-off the area and call the emergency services. Evacuate (and control) an area as far from the gas bottle as practical, in case of explosion.
Opening the valve must be done with caution and only after all components are properly and fully connected for use. Opening the valve causes gas to be ejected at very high pressure and there is a risk of injection of gas into the bloodstream if any part of the body is in the gas stream. Gas in the bloodstream can be fatal and eyes are vulnerable to even a reflected gas jet. The release of gas under pressure can create significant levels of noise sufficient to cause damage to hearing.
Gas cylinders must be properly positioned to avoid accidental knocking-over. If a gas cylinder is knocked over there is a real risk of the regulator shearing off, this will cause the cylinder to become rocket-propelled as the gas escapes (Air Products quoted a figure of 0 – 34 mph in a tenth of a second for oxygen and acetylene cylinders) and there is potential for very serious or fatal injury.
Correct manual handling procedures must be followed at all times, always be aware that cylinders are heavy and unstable, if a cylinder is dropped it can cause serious leg and foot injuries and attempts to lift cylinders or to prevent them from dropping out of control can lead to serious limb and / or back injuries. It is usually safest to let them go, but be aware of the above mentioned valve-shear hazard.

| **Hazard:** | Disc-cutting (includes hot works) | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

The area where disc cutting operations are to be carried out must be thoroughly inspected for fire risk from sparks / molten metal etc. before any works are started. If risk is found to be present then cutting works must be carried out elsewhere, where the risk is so low as to be practically non-existent.
Only trained and competent operatives are to change cutting wheels or operate cutting equipment.
Full PPE including appropriate clothing, heavy gloves and appropriately impact rated protective eyewear is to be issued and properly used during all cutting works.
Remove any clothing that may prove an ignition source if present (e.g. some types of polyester fleeces and Hi-Vis vests).
Remove any items that may get entangled or drawn-in to the disc cutter, including loose clothing, scarves, jewellery etc. and tie-back long hair.
Only trained competent operatives are allowed to change the cutting wheels.
Provide suitable fire-fighting equipment to be kept in work area at all times.
Operatives to remain on site for at least 60 minutes after completing cutting work and to check for signs of combustion and the cooling down of the area worked on.
When using this equipment operatives are to work in shifts of no more than 20 minutes use in any one hour to minimise exposure to vibration.

| **Hazard:** | Fire escape routes becoming obstructed by works | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

Identify any existing fire paths on the roof, and as far as is absolutely practicable these areas must not be obstructed by materials, rubbish or plant at any time.
At other times when work on the fire escape routes must be undertaken, this must be carried out in a clean, tidy and organised manner, with as little obstruction / nuisance being caused, and also carried out in such a way so that should an emergency arise, the fire route can be reinstated immediately so as to provide reasonable means of escape.
If it cannot be avoided that the existing fire route will be seriously compromised by the works being carried out, liaise with the building manager / occupants beforehand to arrange to carry out the works at a time of the lowest occupancy of the areas served by the fire route, and arrange to provide temporary alternative but suitable and sufficient escape routes for any remaining persons that may require them.
In all cases, provide information to the Client's staff regarding the works on any fire route and the possible presence of obstructions.

| **Hazard:** | Passenger / material hoist operations | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

Supply purpose made passenger / materials hoist to be erected by competent scaffolders, who must test and certify the hoist as safe and sufficient before we take possession and use it.
Hoist supplier MUST provide a copy of the 6 month LOLER (Lifting Operations and Lifting Equipment Regulations) "Certificate of Thorough Inspection" before it is to be erected or tested on site.
Hoist is to be thoroughly inspected again at no greater than 6 month intervals whilst it is on site.
Prohibit access to hoist area by unauthorised persons.
Only trained competent persons are to operate the hoist and must on discovery of any defect, or suspicion of defect or improper operation, IMMEDIATELY, stop using the hoist, lock it down securely ensuring no others can use it either, and then report their concerns immediately to the Contracts Manager and/or the Safety Division. The hoist is not to be used again under any circumstances without the problem being addressed, rectified, and written authorisation given by the Contracts Manager and/or Safety Division that it is permitted to do so.
Ensure hoist is never overloaded, as per the marked SWL ("Safe Working Load") specification on the equipment used.
Hoist inspection and hand-over certificate must be on site at all times, daily inspections are to be carried out by the Site Foreman and recorded on the Elevator Hoist Daily Checks list attached below.

| **Hazard:** | Cutting / drilling / hammering etc. | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 2 | **2** |

**Control Measures:**

Only trained and competent operatives are to change cutting wheels or operate cutting equipment.
Remove any clothing that may prove a trapping or combustible material from sparks etc. (e.g. some types of polyester fleeces and Hi-Vis vests).
Take all practicable steps to ensure that only the quietest, most dust free machinery and methods of work are employed in order to minimise environmental impact.
Use PPE, i.e. dust mask and appropriately impact rated protective eyewear, and, if noise exceeds guide lines, use ear protectors (see noise risk assessment page).

| **Hazard:** Hand tools | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|
| | 1 | 2 | **2** |

**Control Measures:**

All hand tools are to be checked on a daily basis for identifiable faults, loose fittings or worn / splintered handles etc. and are NOT to be used if faults are found.
All faulty hand tools are to be labelled as out of service and are to be repaired as soon as possible, either through the operative or the management sending them to a service centre, or are to be disposed of and replaced.
Operatives are to be fully conversant with the safe use of any hand tools they use.

| **Hazard:** Powered hand tools | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|
| | 1 | 3 | **3** |

**Control Measures:**

All power tools must be no more than 110 volts and are to be checked on a regular basis by a trained, competent person and certified as safe to use (PAT tested).
All power tools are also to be checked on a daily basis for identifiable faults, loose plugs, fitting or worn / frayed cables etc. and are NOT to be used if faults are found.
All faulty power tools are to be labelled as out of service and are to be repaired as soon as possible, either through the operative or the management sending them to a service centre.
Only experienced, trained persons are to use power tools and only with appropriate P.P.E.
Keep tools well maintained. Report all faults at once using the proper form provided.
Do not use electrical tools or cables in wet conditions, or allow cables to trail through ponded areas.
Do not use electric tools if hands are wet or operative is standing in water.
If a 240v power source is drawn from then a 110v transformer is to be placed as close as possible to the source and connected with its own separate RCD (Residual Current Device) at this source (do not rely on building's fuses, circuit breakers, etc.)
No 240 volt extension cables are allowed on site.

| **Hazard:** | Circular saw use | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

The area where cutting operations are to be carried out must be cleared and kept free from trip hazards or obstructions that may cause awkward posturing when using circular saws.
Only trained and competent operatives are to change cutting wheels or operate cutting equipment.
Full PPE including appropriate clothing, heavy gloves and appropriately impact rated protective eyewear is to be issued and properly used during all cutting works.
Remove any items that may get entangled or drawn-in to the saw, including loose clothing, scarves, jewellery etc. and tie-back long hair.
When using this equipment operatives are to work in shifts of no more than 20 minutes use in any one hour to minimise exposure to vibration.
See other risk assessments with regard to using electrical equipment on site.

| **Hazard:** | Manual handling | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 2 | **2** |

**Control Measures:**

Where reasonably practical, manual handling is to be avoided and mechanical handling means employed instead, e.g. hoists, cranes, lifts, pallet trucks, trolleys, etc.
Operatives involved in manual handling are to have been trained in manual handling techniques or given specific on-site induction regarding handling of the specific items of concern on this site.
Where specified in this documents Risk and COSHH Assessment control measures, appropriate P.P.E. must be worn whilst handling materials; e.g. hard hat, goggles, gloves, protective footwear, appropriate clothing and face masks, etc.
Great care should be taken when handling heavy or awkward materials, maximum assistance should be sought at all times.
Avoid lengthy repetitive actions, awkward postures, stooping and twisting etc. when lifting, moving or otherwise handling loads.

| **Hazard:** | Weather - high winds and other adverse conditions | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

For all general roofing works the safe limit wind speed is considered 35 mph.
If the weather conditions exceed the safe limit for the type of work being carried out, in constant winds or constantly gusting to the safe limits or exceeding them, then that work must stop and not to proceed until the winds drops to acceptable safe levels.
In thunder storms, heavy rain, snow, mist or foggy conditions etc. work will cease, until conditions improve to the Foreman's approval.
In lightning storms or if lightning is an imminent threat, then the roof level is to be evacuated immediately and as far as possible all metal objects removed to ground level if it is safe to do so.
Operatives will not step onto icy or slippery surfaces under any circumstances.
In excessively hot conditions, operatives and Foremen must constantly monitor themselves and those around them, and take sufficient breaks and plenty of fluids etc. to minimize the impact. If heat sickness symptoms are felt (nausea, dizziness, sickness, headache, over-tiredness, stopping sweating, etc), stop work, rest, take on fluids, and seek medical attention immediately if symptoms are persistent or severe (especially stopping sweating, this can indicate heat stroke which can be life threatening!).
The above are guidelines only, specific weather and site-area conditions must be assessed and reassessed continually, including hot weather and the problems it may cause, by the Site Foreman, and if conditions are considered hazardous then the works must stop until conditions improve. If in doubt, contact the Health & Safety Division.

| **Hazard:** | Bacteriological contamination from decaying animal carcasses / animal waste | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

**Personal hygiene is to be of paramount consideration at all times!**
Potential diseases include Leptospira interrogans (Weil's disease), Psittacosis, Histoplasmosis, and many others besides.
If carcasses and waste must be removed then damp down the items to suppress airborne particulates and use suitable PPE, i.e. heavy rubber gauntlet style gloves and disposable overalls, and vapour masks with FFP3 protection filters.
Use (domestic strength only) disinfectant to spray clean the area after clearing the debris.
All carcasses and waste to be placed in double plastic bagging with the tops tied up, PPE and gloves to be taken off by turning them inside out and depositing them within the outer plastic bag then tying it closed, always remove your face mask last!
Dispose of all waste by registered carrier to a registered (non-hazardous) landfill site.
Supply First Aid kit with suitable cleansing agent for any sustained wounds.
Supply suitable cleaning facilities for use at completion of task.
Take measures to reduce as far as reasonably practicable the ingress of foul smells and dusts / spores into the building being worked on, and affecting neighbours and passers-by.
If operatives contract flu-like symptoms within 2 weeks of carrying out these operations, they must contact their doctor and advise them of the work they have carried out and what they were exposed to.
Also refer to COSHH data sheet below (Zoonoses).

| **Hazard:** | Environmental contamination inc. ground, watercourse, noise and atmospheric | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

**Noise and dust** are to be kept to a minimum and no fires are allowed.
**Asphalt, felt and bitumen** have been designated as non-hazardous waste, but suitable pot spill trays are to be used at all times.
**Solutions and mastics** e.g.; primer, Roofabrush, Acrypol, all waterproofing solutions, silicone and other mastics especially solutions containing Isocyanates, (etc.), should be considered as harmful, and strict measures taken to avoid spillage including the use of "Spill Kits". Their containers are to be completely dried out before disposal; otherwise they must be disposed of as hazardous waste.
**Tanalised treated timber** is considered as a contaminated material and must be disposed of accordingly.
**Wrappers and containers** may be considered to possibly be contaminated by the materials they have held and must be disposed of accordingly.
**Cement and concrete** are hazardous when wet and being mixed, and full preventative measures must be taken to ensure their wet waste does not enter the ground or drainage systems.
**Non-hazardous materials** on site include roof tiles, natural slates, untreated timbers, un-coated steel and glass and can be disposed of as non-hazardous waste.
Operatives must be vigilant and prepared to enact spillage control measures at all times.
Also refer to all other Risk Assessments and COSHH Assessments (below) for further advice.

| **Hazard:** | Sharp edges of materials | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 2 | **2** |

**Control Measures:**

Use P.P.E. to protect against personal injury; safety goggles, suitable hand protection, such as heavy leather gloves to protect hands from sharp edges, and sturdy long trousers and sleeves.
Where stacks or stores of materials with sharp edges or corners are present, mark the boundaries of these with barriers or warning signage / tape, and do not store stack such materials where there is limited access past them, suitable and sufficient clearance must be provided at all times to a minimum of at least 1.0 metres.
Where materials with sharp edges / corners have been installed, such exposed edges must either be made safe (covered or taped), marked with warning tape, or barrier's put in place to prevent accidental contact and injury, this is especially important in areas where the sharp edges are adjacent to travel routes.
Keep a First Aid kit nearby with suitable cleansing agent for any sustained wounds.
Sharp and brittle materials are not to exceed shoulder height when being carried / worked on.

| **Hazard:** | Previously unidentified and hidden hazardous objects (needles, sharps, etc.) | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

**Warning!** Needles have been reported as being found embedded in the tops and over the tops in the backs of timber gates etc., especially on electricity sub-station sites, take extreme care in any such areas and do not put your hands in places you cannot see to check for hazards first.
Where amounts of undergrowth or other obstructions are present and need to be cleared back, operatives are to take extreme care and vigilance for hazardous objects at all times and wear suitable PPE, i.e. heavy gloves, work-boots and clothing etc.
If a syringe or needle, possibly contaminated sharp object, or other deleterious material such as human waste, animal carcasses, etc. etc. is discovered anywhere by any employee on site it must not be touched.
The Contracts Manager or Director, Company Health & Safety Division and the Client must be informed immediately.
The area around the discovery is to be marked off and not to be approached or worked on within a 3.0 metre radius.
The Contracts Manager or Director or the Client will co-ordinate to call-in specialist fully trained and competent contractors to remove the hazardous items. Only they are to pick-up, collect and remove needles, sharps syringes, waste, carcasses etc. from site.
Only after all such hazardous materials have been removed will works in that area be allowed to continue.

| **Hazard:** | Steel fixings (nails) breaking | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 2 | **2** |

**Control Measures:**

Supply P.P.E. to protect against personal injury; safety goggles, suitable hand protection.
Particular care is to be taken with brittle fixings in regards to proximity of exposed skin and eyes, cover up as appropriate.

| **Hazard:** | Noxious fumes from existing flues | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

Confirm that flues that discharge into work area have been disconnected from the fume source, or that the process creating fumes is securely shut down and prevented from reinstatement before work commences each day.
Major precautions need to be taken regarding flues that discharge inflammable gasses before works are undertaken.

| **Hazard:** | Solutions, solvents, adhesives and vapours | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

Check the details of the materials being used on the COSHH Assessments attached below and follow the manufacturer's material handling / use instructions detailed in those sheets and on the containers of the materials.
Avoid inhalation of noxious vapours, use P.P.E. as detailed in the COSHH Assessments below i.e. appropriate vapour masks (FP3 rated vapour protection masks), goggles and heavy rubber gloves (Not required for use of Sika Decothane Systems.
Ensure free flow of clean air into work area.
Do not wear clothes saturated with solutions or solvents, change as soon as possible.
Clean skin as per manufacturers instructions, avoid contact with eyes and do not ingest.
Keep products safely away from where children or animals can come into contact with them.
Greatest care must be taken during unloading, handling and storage, to avoid spillages, punctures, bursts or other rupturing of the products containers.
If any discomfort or effects are felt from breathing vapours, stop work immediately and contact the Site Foreman, Contracts Manager or Health and Safety Division for further advice.
Before using or storing materials that give off noxious vapours, check the area for air intakes into any building or any roof details, A/C units or kitchen vent intakes, etc. and ensure Think Contractors have confirmed all units within a 10m radius are turned off before starting liquid applied works. Materials must not be stored near such intakes, and if the materials are to be used close-by to such intakes the intake services must be shut down and the intakes sealed over until the materials have been applied and dried and have stopped giving off vapours. In such cases close liaison with the Client, building occupants and managers will be required to carry out these works in a manner that will cause the least disruption or inconvenience to the buildings occupants.

| **Hazard:** | Over-loading of roof structure | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

Where the roof surfaces are to be used as storage areas for materials plan such storage by inspecting the underlying and surface structures to identify the structural suitability to bear the imposed loads.
All materials are to be spread evenly on appropriate supports – use timber boards as and if necessary.

| **Hazard:** | Chemically treated timbers | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 2 | **2** |

**Control Measures:**

If any timber delivered to site is still in a wet condition from being treated, operatives must wear rubber gloves and any other appropriate P.P.E. to avoid skin contact or ingestion.
Personal hygiene must be of priority at all times.
Storage area to be cordoned off to preclude the general public access.
All waste to be disposed of as hazardous material.

| **Hazard:** | Dusts and/or airborne particulates (general) | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 1 | **1** |

**Control Measures:**

Use adequate RPE (dust mask to FP2 filtration protection), gloves and overalls / long sleeves and trousers as appropriate, to protect exposed skin.
Refer to COSHH assessments below for full details of hazards associated with different materials.
For general dusts and fibres, FP2 dust masks are considered suitable and sufficient, however, these ARE NOT to be used to protect against fumes, solvents, solutions, asbestos dust, etc. or anything else of a greater hazard than general dusts and fibres. For these other hazards, specific equipment intended exactly for those hazards must be identified, selected and used.
If operatives find working conditions prove that the equipment is not sufficient to its task then works must stop, the Health and Safety Division contacted, and new more appropriate equipment will be selected and issued.

| **Hazard:** | Cement and cement bonding agent | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 2 | **2** |

**Control Measures:**

Use appropriate P.P.E. for the task, i.e. gloves, long sleeves, long trousers etc. and avoid contact with skin. If clothes become saturated then they must be changed immediately.
Supply eye-wash station to be readily available at all times.
WARNING - Do not allow extended skin contact with wet cement or sand and cement mix, or extended contact through clothes soaked with same, or serious skin burns may result.
Operatives must take spillage precautions and be aware of spillage containment measures in order not to allow any waste to enter watercourses or soak into the soil, and will clean up and dispose of all waste appropriately at a registered waste site.

| **Hazard:** | Existing overhead or underground services | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

Check with Client, CDM Coordinator or Utility Suppliers for location of services, ensure underground hazards such as sewers and drains do not cause risks to heavy machinery such as cranes, tele-handlers and delivery lorries etc.
Protect and restrict ground / overhead area as necessary.
Avoid by at least 3.0 metres any high voltage cables and take measures to ensure accidental encroachment of such safety zones cannot be breached, i.e. use barriers, “goal post” structures etc. and carry and move all long materials horizontally, NOT vertically.
Overhead telephone wires etc. must be worked around carefully without disturbing them, if they are mounted to surfaces being worked on, ensure they are securely temporary fixed in place, if they must be removed, written permission must first be obtained.
Where existing cables crossing the workplace cannot be removed, they must be flagged with high visibility tape.
Written permission must be obtained before disconnecting and moving any satellite dishes.

| **Hazard:** | 240 volt (or more) use on site | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | 1 | 3 | **3** |

**Control Measures:**

As far as is possible, power usage on site should not exceed 110 volts maximum.
Where this is absolutely not practical due to the nature of the works or requirements of the equipment on site, 240 volt (or greater) power sources may be used.
RCD’s (Residual Current Devices) and all other protective measures must be installed and tested on a daily basis.
All cables must be strenuously protected from damage, and wherever possible mounted at above head height.
Cables, plugs and connectors etc. must be regularly checked for damage and damaged items taken out of service and replaced immediately.

| **Hazard:** | All other and previously unidentified hazards not included above | Likelihood | x Severity | = Residual Risk |
|---|---|---|---|---|
| | | - | - | - |

**Control Measures:**

All operatives and especially Site Foreman are reminded of their duty to themselves and others to maintain a vigilant, pro-active attitude towards health and safety at all times.
All operatives have a duty to the Company and all others to constantly assess and re-assess the site and the working conditions, pro-actively put control measures in place to address / remove new hazards identified, and work actively with the Contracts Manager and Safety Division in creating new control measures and risk assessments as required.

# COSHH (Control of Substances Hazardous to Health) Assessments

## Zoonoses micro organisms (Weils disease, bird flu, etc.)

**Substance:-**

Micro organisms that can be transmitted from animals to humans (zoonoses)

**Product Composition:-**

Leptospira interrogans (Weils disease), believed to be a virus type infectious agent from rats.
Psittacosis, believed to be a virus type infectious agent from pigeons,
Histoplasmosis can be caused by spores within bat droppings.
Avian influenza A (bird flu) subtype H5N1 is a highly pathogenic (HPAI) strain (high severity strain) of the virus that has been confirmed in poultry populations across Asia, Russia and some southern European countries. Although this is a disease of birds it has been shown in S.E. Asia that it can (although rarely) be transmitted to humans. H5N1 is also important because it raises the concern that it could recombine with seasonal human influenza virus and create a new and potentially pandemic human flu strain.

**Occupational Exposure Hazards:-**

All persons working within the construction industry environment where there is the possibility of rodent, bird, bat or other animal infestation are at risk. This risk is not exponential to the number of animals present,
and may be present anywhere.

**Classification:-**

Infection can be transmitted to humans through debris, blood splashes, urine and dust via skin lesions or ingestion and by airborne spores.
Particular risk environments are railways, docks, derelict buildings, roof voids, building sites and anywhere inhabited by humans or animals, or where there is a source of food.
Symptoms are usually flu-like and may incubate for ten to fourteen days before becoming felt.
Operatives suffering such symptoms must bear in mind where they have been working and under what conditions, and could their “cold” or “flu” actually be something more serious. If in any doubt they should visit their Doctor immediately and tell them where they have been working and that they may have been exposed to an animal related disease.

**Advisory and Precautionary Actions Required:-**

Cover all cuts and skin abrasions with waterproof plasters, personal hygiene should be of paramount importance. The safe and secure storage of all tools when finished with at the end of each day should be a matter of routine. This topic is to be discussed at the induction training.
Avoid inhaling dust, wear face dust mask, gloves and skin protection (overalls).
Wash skin and clothing off using soap and clean water after exposure.
If one or more dead swans/wild fowl, three or more birds of the same species, or five or more birds of different species are found in the same place, then call the Defra helpline on 08459 335 577 and report it.

## Cement

**Intended Use:-** Intended use as binding agent in construction.

**Product Composition:-** Calcium silicates, ferro-aluminates and sulphates.

Small amounts of alkalis, lime and chlorides.

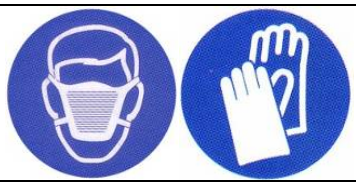
**Occupational Exposure Hazards:-** Alkalis, lime, calcium silicates.

**Classification:-** Hazards include airborne particulates causing possible lung irritation.In wet or dry form cement dust will cause alkaline burns and Dermatitis if in prolonged contact with skin.

Store in dry or weather protected formats only.

**Advisory and Precautionary Actions Required:-**

Avoid inhaling the dust, wear face dust mask if exposure in dry form will be prolonged, or gloves and skin protection (normal clothing) for any exposure in wet form. Wash skin and clothing off using soap and clean water after exposure.
Continued exposure over the years can lead to cumulative serious health threats including Emphysema and severe Dermatitis.



## Bituminous Primer

**Intended use:-**

To be applied to porous and semi-porous substrates to promote a secure bond between substrate and built up felt roofing, or as high-bond tack-coat in road construction where dense bitumen Macadam is used.

**Composition (not a complete list):-** Bitumen with white spirit solvent.

**Occupational Exposure Hazards:-**

Occupational Exposure Standards - Bitumen 5mg/m3 (8 hr time weighted average) 10mg/m3 (10 hr time weighted average).

**Classification:-**

"Flammable" - Flashpoint between 32 degrees C to 55 degrees C exclude all sources of ignition during application and during drying time.

**Advisory and Precautionary Actions Required:-**

Use only in well ventilated areas, avoid inhalation of vapour particulates or contact with eyes and skin. Always obtain medical attention if excessive inhalation, eye contact or ingestion has occurred. Fire will produce dense black smoke containing harmful products of combustion. Extinguish with dry powder or foam. Due to presence of bitumen and spirits do not use water.
For fires of this nature use foam, powder or $CO^2$ extinguisher. **No Smoking**

## Propane Gas

**Intended Use:-**

To combust and provide heat source for melting asphalt or bitumen in purpose made boilers, or to use with
gas-guns for applying torch-on roofing products.

**Product Composition:-**

$C^3H^8$ commercial propane to BS 4250, can contain variable amounts of closely related hydrocarbons and contains a stenchant.

**Occupational Exposure Hazards:-**

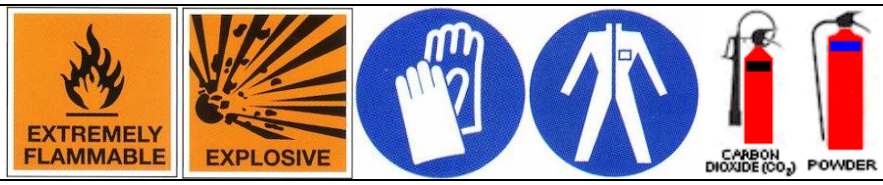
May contain small concentrations of 1.3 butadlene which may cause cancer by inhalation.
Gas or especially liquid contact on the skin may cause cold burns.
Opening the valve causes gas to be ejected at very high pressure and there is a risk of injection of gas into the bloodstream if any part of the body is in the gas stream. Gas in the bloodstream can be fatal and eyes are vulnerable to even a reflected gas jet. The release of gas under pressure can create significant levels of noise sufficient to cause damage to hearing.

**Classification:-**

Extremely flammable liquefied gas under pressure may react violently with oxidants and forms an explosive mixture when mixed with air.
Heavier than air, may accumulate in confined spaces particularly at or below ground level. Cylinders may rupture and explode when exposed to fire. Full cylinders may vent themselves and give off slight amounts of
gas when hot.

**Advisory and Precautionary Actions Required:-**

Keep $CO^2$ or powder fire extinguishers at hand wherever stored or in use, wear gloves and PPE (long sleeves etc.), avoid contact exposure or inhalation. Always store and use cylinders in upright position. Store cylinders in gas cage away from tampering by others when not on site.
Burning gas should not be extinguished unless the gas flow can be cut off immediately - it is usually safer to leave flammable gas burning than to risk building up an explosive mixture of gas and air.
NOTE – fire extinguishers are not usually the best way to put out a gas bottle or pressurised gas fire. If it is safe to do so and the bottle valve is intact and in good working order, turn it off (whilst protecting your hand from fire), otherwise use an extinguisher, constantly check bottles for heat afterwards and if found to be hot evacuate immediately, call on all others to evacuate, cordon-off the area and call the emergency services. Evacuate (and control) an area as far from the gas bottle as practical, in case of explosion.
Gas bottles heated by an external fire must be left alone and the area evacuated as above.



## Tanalised Timber

**Intended Use:-**

A water resistant, treated timber building product.

**Product Composition:-**

Inorganic chemical formulation containing copper, chromium and arsenic as active ingredient.

**Occupational Exposure Hazards:-**

None assigned.

**Classification:-**

“Flammable”, keep away from sources of ignition.

**Advisory and Precautionary Actions Required:-**

Treated timber will normally be supplied dry, if any dampness is present then use protective gloves and wash
hands with soap and water after handling. In all cases hygiene should predominate as a matter of routine.

For fires of this nature use a water, foam, powder or $CO^2$ extinguisher.


## Low Modulus Silicone Sealant

**Intended Use:-**

A detail-sealant product for use within the construction industry for non-primed surfaces.

**Product Composition:-**

Dimethylpolysiloxane oils and inert fillers, alkylalkoxysilane, methyl glycol and volatile alcohols.

**Occupational Exposure Hazards:-**

None assigned.

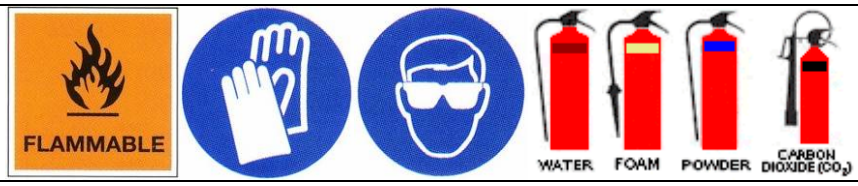
**Classification:-**

“Flammable”, keep away from sources of ignition.

**Advisory and Precautionary Actions Required:-**

Low hazard. Should be used in well ventilated area.
Avoid skin and eye contact and do not ingest.
Use personal protective equipment, i.e. gloves and goggles.

For fires of this nature use water, foam, powder or $CO^2$.



Health and Safety On- Site Tool Box Talks

| Date: | Talk given to | Subject | Talk given By | Signature of Recipient |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |