SJJ System Services Limited
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1.0 Method statement

Document created: 13 Sep 16
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Prepared by: Steve Jones
Position: Managing Director

Generic RAMS

Site address:
SJJ System Services Ltd
Unit 20 Heads of the Valleys Ind Est
Heol Klockner
Rhymney
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Project reference: Quotation Copy
Client reference: Sample
Client: Sample
Principal designer: N/A
Principal contractor: N/A
Start date and end date: 12/09/2016 to 08/09/2017

1.1 Description of activity

This is a general document to cover all aspects of Service, Repair, Maintenance, Calibration and upgrades on all types of test chambers and systems. Site specific will be generated upon order agreement

1.2 Sequence of operations

1.2.1 HVAC

Service and maintenance

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

Removal of existing HVAC services

- Isolate associated services as required
- Erect access equipment in accordance with safe use of ladders guidance notes / erection of tower scaffolds
- Removal of existing condensate using gravity drainage or pump
- Removal of internal fan coil units
- Removal of duct work and grills
- Removal of exterior condensers
- Remove all items from site

Pipework installation

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

Condenser unit(s) install

- Floor mounted condenser to be installed to mounting block or concrete slab on level and solid surface
- Wall mounted condenser to be installed level to uni strut or other secure fixing point as approved onsite
- Big Foot mounted condenser to be installed level to framework as per manufacturers instructions

Low voltage electrical works

- User advised of risks of electric shock, burns, and fire before commencing and necessary site checks undertaken
- Erect safe working platform where needed
- Install low voltage cable, tied to containment or anchored to pre-determined route.
- Connect to associated equipment

Fan coil / AC unit installation

- Erect safe working platforms when working at height
- Use manual lifting plant to lift unit into place
- Fix unit into place with secure fastenings - refer to manufacturers instructions
- Ensure isolation of associated services before connecting up

Pressure testing pipework

- Check with management if permit required
- Before carrying out the pressure test, precautions shall be taken to evacuate all personnel from the area of risk and post notices advising that the system or equipment is under pressure
- Strength / leak test to 1.1 x Max working pressure of the system, for a min. of 15 mins at 100 psi

- If no leaks, undertake pressure test with oxygen free nitrogen according to specifications and document results
- Test pressure shall not exceed that applied to the components by the manufacturer of the particular component
- The pressure in the system should be built up gradually and monitored by a remote gauge located in a safe place
- Once the test pressure is reached, the nitrogen cylinder(s) should be closed off and isolated from the system under test
- The test pressure in the system should be held for at least one hour but must follow manufacturers specification
- If any leaks are present the fault(s) should be corrected and the system re-tested following codes of practice and pressure systems legislation

Adding of refrigerant

- Refer to risk assessment for identified hazards and control
- Ensure refrigerant cylinder log sheet kept with the amount of refrigerant used and the details of the equipment used
- Check plant has been evacuated or holds a positive pressure of the same refrigerant
- Employ a decanting machine when evacuating part of / or the whole system, no refrigerant must be allowed to escape into atmosphere
- Ensure air and moisture in charging line is kept to an minimum
- Run system and charge refrigerant according to manufacturer specifications and codes of practice
- Run leak test

Test & Commissioning

- Test the pipes for leaks under pressure in the presence of client's representative
- Perform hydraulic/smoke test and obtain certification form client's representative
- Maintain a 'test certificate' duly signed by the representatives of the client and contractor
- Erect safe working platform where needed by a trained operative
- Power up of system by trained operatives
- Contractor to undertake commissioning as per manufacturers spec
- Manufacturer to undertake commissioning as per manufacturers spec

1.2.2 Electrical

Electrical isolations

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

Removal of existing electrical services

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

Testing and commissioning

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

1.2.3 Plumbing

Sign in and induction

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

1.3 Risk assessment register

1.4 Supervision and personnel

- Stephen Jones - Managing Director: 07506 777890
- Ryan Whitfield - Apprentice

1.5 Training

All operatives are adequately trained to carry out required tasks.

Site Foreman is SSSTS approved.

Site Managers are SMSTS approved.

All site operatives hold current certification and have the following training:

- CSCS certification
- ECS certification
- JIB trade cards
- Test engineers hold city and guilds 2391 certification
- All operatives are apprenticeship served electrical engineers
- Working at heights training
- Asbestos awareness training
- Abrasive wheels training
- Stepladder training
- All operatives are apprenticeship served plumbing engineers

1.6 Legislation

- Health and Safety Work Act 1974
- The Management of Health and Safety at Work Regulations 1999, amendment 2006
- Workplace (Health, Safety and Welfare) Regulations 1992
- The Control of Asbestos Regulations 2012
- Provision and Use of Work Equipment Regulations (PUWER) 1998
- The Reportable Injuries Diseases & Dangerous Occurrence Regulations 2013 (RIDDOR)
- Control of Substances Hazardous to Health Regulations 2002
- The Work at Height Regulations 2005
- The Personal Protective Equipment at Work Regulations 2002
- The Manual Handling Operations Regulations 1992
- The Construction (Design and Management) Regulations 2015
- The Management of Health and Safety at Work Regulations 2006
- The Pressure Systems Safety Regulations 2000
- Pressure Equipment Regulations 1999 (SI 1999/2001)
- The Environmental Protection Act 1990
- F-Gas Regulation (EC) 517/2014
- Ozone Depleting Substances Regulation (EC) 2037/2000
- The Hazardous Waste Regulations 2005
- Electricity at Work Regulations 1989

1.7 Codes of practice

1.7.1 Electrical codes of practice

- BS EN 61439 2009 - 2012 Low-voltage switchgear and controlgear assemblies.
- BS 5266 Parts 1-10 & BS EN 50172 1999 - 2008 Code of practice for emergency lighting.
- BS 5424 Parts 2 and 3, and IEC 60158 part 3 1985 - 1988 Specification for low voltage control gear.
- BS EN 60422 2008 Monitoring and maintenance guide for mineral insulating oils in electrical equipment.
- BS EN 60079-30-2 2007 Electric surface heating.

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

1.7.2 HVAC codes of practice

- BS 8000-13:1989 Workmanship on building sites. Code of practice for above ground drainage and sanitary appliances
- BS 8000-15:1990 Workmanship on building sites. Code of practice for hot and cold water services
- BS 6465-2:1996 Sanitary installations. Code of practice for space requirements for sanitary appliances

1.8 Other

- British Refrigeration Association Guide to Good Commercial Refrigeration Practice.
- Institute of Refrigeration Code of practice for the minimisation of refrigerant emissions from refrigeration systems.
- Institute of Refrigeration safety code for refrigerating systems utilising group A1 and A2 refrigerants.
- City & Guilds 2079 certificates in Handling Refrigerants.
- CITB Safe Handling of Refrigerants certificate.
- The British Refrigeration Association’s Specification for Brazing and Brazer Assessment.
- HSE Guidance Note EH55 - The Control of Exposure to Fume from Welding, Brazing and Similar Processes.
- HSE Guidance Note EH54 - Assessment of exposure to fume from welding and allied processes.
- HSE Guidance Note MS15 - Welding.
- HSE Guidance Note PM64 - Electrical Safety in Arc Welding.
- A competent electrician, who has successfully attended a 18th Edition conversion course, must supervise any electrical work.
- Health risk management: a guide to working with solvents [HS(G)188]
- Health and safety in construction [HS(G)150]
- Health and safety in arc welding [HS(G)204]
- Manual Handling [HS(G)115]
- The safe use of compressed gases in welding, flame cutting and allied processes [HS(G)139]
- Safety in pressure testing [GS4]

1.9 Method of access

- All operatives will be inducted by onsite supervisor.
- All operatives will maintain access and egress routes, and ensure that materials required for the task do not obstruct access to work areas and any debris caused by their operation will be removed.
- Waste will be kept to a minimum and removed from site each as agreed with client.
- Any problems with access & egress routes will be reported to the Site Supervisor.

1.10 Working from height

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

1.11 Tools and equipment

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

- Hand tools
- Step ladders/podium steps/access towers
- Power tools (battery or 110v)
- Digital thermometer
- Refrigeration gauges
- Digital Volt/Ohm/Amp meter
- Vacuum pump
- Recovery machine
- Pipe bender & cutter
- Welding / Arc tools
- Insulated hand tools
- Digital volt/Ohm/Amp meter
- Insulated rubber mats and gloves
- Jig saw
- Cold cutter
- Cable jacks
- Lifter
- Pipe threading machine
- Welding / arc tools

1.12 Special permits

Hot works permit may be required onsite and to be organised with site management.

Permit to work may be required to work in riser cupboards, isolations or working on live power, these and other permits to be organised with site management as needed.

Hot Works

Site operatives shall adhere to the principal contractors HWP requirements and fire watch policies

The principal contractor will be the sole issuing authority for HWP

The principal contractor will ensure all site operatives are aware of emergency procedures at site induction

The principal contractor will make all site operatives aware of their basic requirements when undertaking Hot works which may include the following:

The user must comply with safe procedures and manufacturers instructions whilst undertaking hot works

Any areas where hot works are to be undertaken must ensure combustible materials, flammable liquids and gas cylinders are removed from immediate area

Fire extinguishers placed in local area of proposed hot works

Hot works area co-ordoned off and operatives told of immanent works

The user must not use an open flame whilst wearing clothing soiled with grease or flammable liquids

The user must not use open flame in an atmosphere containing flammable vapors, explosives, dust or in confined spaces such as tanks

The user must not use open flame in conditions where there are strong winds

The user must extinguish any open flame when not in use

The user and site supervisor should ensure of adequate ventilation to area

It is advised a second person should watch over the hot works whilst being undertaken as a spotter

Once hot works complete, the immediate area should be tidied up, checked for signs of ignition and signed off as a safe and now normal working area

1.13 General waste handling

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

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

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

Ensure the correct PPE is worn when handling waste.

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

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

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

1.14 Use of skips

Waste is to be deposited into a skip.

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

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

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

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

Always use a banksman when skip vehicles are reversing.

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

No hazardous material is to be deposited into skips.

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

Never climb into a skip.

1.15 Hazardous waste

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

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

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

1.16 Hazardous Substances

Highly Flammable

Dangerous For The Environment

Gas Under Pressure

1.17 Emergency procedures

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

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

1.18 First aid facilities

Refer to the onsite safety notice board for all first aid information.

A first aid box with enough equipment to cope with the number of workers on site should be provided for by the client or principal contractor.

The client or principal contractor should nominate an appointed person to take care of first-aid arrangements.

The number of appointed first aiders shall be dependent on the number of employees:

- < 5: At least one appointed person.
- 5–50: At least one first-aider trained in EFAW or FAW, depending on the type of injuries that may occur.
- More than 50: At least one first-aider trained in FAW for every 50 people employed.

1.19 Welfare requirements

Welfare arrangements are supplied by the client or principal contractor.

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

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

1.20 PPE Requirements


Hard Hats


Safety Boots


Hi Vis Vest


Safety Gloves


Hearing Protection


Dust Mask


Safety Glasses


Safety Goggles


Protective Clothing

1.21 Manual handling

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

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

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

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

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

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

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

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

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

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

- Make sure the route is clear of obstructions.

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

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

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

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

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

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

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

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

T - The Task

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

I - The Individual

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

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

L - The Load

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

E- The Environment

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

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

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

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2.0 Risk assessment

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Risk matrix

Likelihood 4
x
Severity 5
=
Risk/residual risk 20

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

2.1 Delivery of materials

2.1.1 Task: Unloading of materials

Hazard	Risk	Control measures	RR
Falls from height or back strain / injury during unloading	5 x 4 = 20	Delivery driver to avoid manual handling beyond their capability, which they believe may cause injury Delivery driver to ensure mechanical lifting aids (Teleporter, pallet truck etc) to be used to off load materials wherever possible Delivery driver to ensure correct loading of delivery vehicles prior to vehicles leaving materials yard and to ensure security of load for transportation Materials to be palleted and wrapped wherever possible Delivery driver to ensure delivery vehicles are loaded in correct order for deliveries so as to eliminate the need for re-stacking of materials after first delivery has been made	1 x 4 = 4

Persons at risk: User

2.1.2 Task: Unloading of materials

Hazard	Risk	Control measures	RR
Injuries from falling loads or mechanical failure of tail lift whilst unloading	5 x 4 = 20	Delivery Driver to take care when opening doors or curtains as to the security of the load Delivery vehicle door or curtains only to be opened from the ground and no entry to be made to the vehicle whilst the doors or curtains are open Tail lift only to be operated under manufacturer's recommended weight limits Tail lift to be inspected as per manufactures recommendations If manual unloading is to be carried out items are to be positioned to the area required with the curtain / doors closed Tail lift may be used as an interim platform for loading / unloading	1 x 4 = 4

Persons at risk: User

2.2 Preventing slips, trips and falls

2.2.1 Task: Movement at height or on raised platforms

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

Persons at risk: All site operatives

2.2.2 Task: Movement at ground level

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

Persons at risk: All site operatives

2.3 Arrival & departure from site

2.3.1 Task: Unloading equipment

Hazard	Risk	Control measures	RR
Electrical shock or fatal injuries sustained from contact with overhead cables	4 x 5 = 20	Check prevailing site condition and ensure all deliveries undertaken in pre-determined safe area No vehicles to be parked or unloaded in the vicinity of overhead lines If necessary for deliveries to be undertaken below overhead cables, ensure works and area coordinated with either local authority or principal contractor with sufficient protection in place for workers and public, together with ensuring safe working distances are achieved and goal posts are used where required	1 x 5 = 5

Persons at risk: User

2.3.2 Task: Unloading equipment

Hazard	Risk	Control measures	RR
Crushed by falling load with potentially fatal injuries	5 x 5 = 25	Deliveries to be taken in designated areas only, other workers & public to be kept outside of delivery area Any machinery used for unloading to be operated by trained personnel only and carry a current inspection certificate Any items that could potentially be lifted by the wind should be placed in designated anchor areas and or weighted down Ensure any equipment used for unloading is not operated in overly windy conditions - refer to equipment or plant guidelines Goods should be placed on firm level ground in designated areas, height of goods should be kept to a minimum to prevent stack failure	1 x 5 = 5

Persons at risk: All site operatives & public

2.3.3 Task: Leaving vehicle

Hazard	Risk	Control measures	RR
Struck by moving vehicles	4 x 4 =	All operatives to park in designated areas Follow site rules and authorised routes provided by client or principal contractor All operatives to wear hi-visibility jackets when leaving vehicle	1 x 4 =

	16	All operatives to enter and sign in onsite All operatives to receive induction Banksman to be used when vehicles are reversing	4

Persons at risk: All site operatives

2.3.4 Task: Leaving or entering site

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

Persons at risk: All site operatives & public

2.3.5 Task: Unloading equipment

Hazard	Risk	Control measures	RR
Muscle strains, sprains & injuries caused by lifting heavy loads	3 x 3 = 9	Use correct lifting techniques, all operatives should be trained in the safe method of lifting - refer to manual handling section in attached method statement Ensure two man lift is enforced for reaching or carrying heavier items Split loads to make them lighter and safer to handle Although no universal safe maximum, mechanical aids to be used when loads exceed 25kg per person or as referenced in method statement Be aware of handling large or bulky items e.g. plasterboard in windy conditions	1 x 3 = 3

Persons at risk: User

2.3.6 Task: Unloading equipment

Hazard	Risk	Control measures	RR
Falls from Vehicles, drivers may suffer serious, possibly fatal, injuries if they fall from the cab or vehicle of a trailer	3 x 5 = 15	Loading and unloading is planned. Working on the bed of the trailer is avoided Suitable access equipment is used to access the trailer unit and drivers trained how to use it safely Drivers trained in safe system of work for sheeting loads, eg safe use of PPE Fall arrest equipment inspected by a competent person prior to use Drivers instructed not to walk backwards on the trailer or to jump from the cab/trailer Fixed steps and grab bars allow drivers to access cab safely. Remind drivers of need for good housekeeping in trailer and in cab Retrofit foldable steps to improve access to trailer bed on two vehicles Consider using other forms of access equipment where appropriate, eg mobile elevating working platforms (MEWPS) or podium steps	1 x 5 = 5

Persons at risk: All site operatives

2.4 Lone working

2.4.1 Task: Working alone

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

2.5 Working out of hours

2.5.1 Task: Working out of hours

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

Persons at risk: All site operatives

2.6 Working in occupied areas

2.6.1 Task: Working in areas of high volume of movement

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

Persons at risk: All site operatives

2.7 Working around live electrical equipment

2.7.1 Task: Working close to or adjacent to electrical services

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

Persons at risk: All site operatives

2.7.2 Task: Working in areas near live electrical equipment

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

Persons at risk: All site operatives

2.8 Using blow lamp or similar

2.8.1 Task: Using blow lamp or similar

Hazard	Risk	Control measures	RR
Serious injuries sustained from fire or explosions whilst using a blowlamp or similar for brazing/bronze welding (oxy-ccetylene & oxy-propane)	4 x 5 = 20	A hot work permit system should be implemented onsite by the principal contractor or client Site operatives must comply with safe procedures and manufacturers instructions whilst undertaking hot works Only suitably trained and competent personnel are permitted to carry out hot works User must ensure all combustible materials are removed, with flammable liquids and gas cylinders beyond the range of the blowtorch When using a blowtorch on metal surfaces, combustible material in contact with the metal behind or adjacent to the work area should be removed before work commences Keep a watch whilst work is in progress for signs of fire or smouldering in the immediate vicinity Ensure a portable fire extinguisher is readily available wherever and whenever hot works are in progress Always extinguish a blowtorch when not in use and never leave it burning unattended Ensure adequate ventilation where gas burning appliances are in use Ensure area is checked thoroughly at the end of the work period and signed off on hot works permit as being safe by site supervisor and user	1 x 5 = 5

Persons at risk: All site operatives

2.8.2 Task: Using blow lamp or similar

Hazard	Risk	Control measures	RR
Lung damage caused by inhalation of fumes (which may contain cadmium) and skin & eye damage from sealants	4 x 4 = 16	All substances required to perform plumbing activities are identified i.e., lead, solder, plumber flux etc. and the relevant COSHH Assessments and personal protective equipment is made available Consider use of respiratory equipment in confined areas Avoid skin contact with sealants and wash from skin as soon as possible	1 x 4 = 4

		All areas must be kept very well ventilated during sealant works and minimum requirement is to open all doors and windows	
Persons at risk: User			

2.9 Using hand tools

2.9.1 Task: Using portable hand tools

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

2.9.2 Task: Using retractable knife

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

2.10 Using ladders

2.10.1 Task: Using ladders

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

Persons at risk: User

2.10.2 Task: Using ladders

Hazard	Risk	Control measures	RR
Falls from height whilst using ladder	4 x 5 =	All users are trained in the safe use of ladders and working at height User will only carry light materials and tools on ladders User will not overreach whilst on ladder – user to make sure belt buckle (navel) stays within the stiles	1 x 5 =

20	User to make sure ladder is long enough or high enough for the task User to ensure ladder is not overloaded – consider workers' weight and the equipment or materials they are carrying before working at height User to make sure the ladder angle is at 75° – you should use the 1 in 4 rule (i.e. 1 unit out for every 4 units up) User to always grip the ladder and face the ladder rungs while climbing or descending – user will never slide down the stiles User won't try to move or extend ladders while standing on the rungs User won't work off the top three rungs, and will ensure the ladder extends at least 1 m (three rungs) above area of working User not to stand ladders on moveable objects, such as pallets, bricks, lift trucks, tower scaffolds, excavator buckets, vans, or mobile elevating work platforms User to avoid holding items when climbing (consider using a tool belt) User won't work within 6m horizontally of any overhead power line, unless it has been made dead or it is protected with insulation. A non-conductive ladder (e.g. fibreglass or timber) will be used for any electrical work User will maintain three points of contact when climbing (this means a hand and two feet) and wherever possible at the work position Where user cannot maintain a handhold, other than for a brief period (e.g. to hold a nail while starting to knock it in, starting a screw etc), user will need to take other measures to prevent a fall or reduce the consequences if one happened For a leaning ladder, user will secure it (e.g. by tying the ladder to prevent it from slipping either outwards or sideways) and have a strong upper resting point, i.e. do not rest a ladder against weak upper surfaces (e.g. glazing or plastic gutters) and user could also implement an effective stability device Where ladders are operated by a single user, ladder will be fitted with relevant supports for one man use Where a task takes longer than 30 minutes, an alternative means of access should will be considered	5

Persons at risk: User

2.11 Working from step ladders

2.11.1 Task: Working from step ladders

Hazard	Risk	Control measures	RR
Contact with over head cables causing possible fatal injury through electric shock	3 x 5 = 15	Check prevailing site condition Take care when erecting/positioning step ladders close to an services Do not erect step ladder in close proximity to a power cables - seek advice from supervisor before commencing with work	1 x 5 = 5

Persons at risk: User

2.11.2 Task: Working from step ladders

Hazard	Risk	Control measures	RR
Head injuries caused by falling objects	5 x 3 = 15	Barrier off work area Take care when placing step ladder avoiding thorough fare of workers or public if possible When step ladder is secure, remove any dislogable items in close proximity Keep persons away from ladder and surrounding area when carrying out work	1 x 3 = 3

Persons at risk: All site operatives & public

2.11.3 Task: Working from step-ladders

Hazard	Risk	Control measures	RR
Injuries sustained from the unsafe use of step-ladders	5 x 3 = 15	Operatives will ensure that step-ladders are only used for work that is short-term, of a light nature, that requires one hand to be used, and that can be done without stretching Inspect step-ladders before use to ensure that there are no obvious defects Do not paint stepladders, or use those that have been painted, painting can cover up defects Do not put step-ladders in front of doorways without taking appropriate precautions to prevent people bumping into them and never obstruct a fire exit with a ladder	1 x 3 = 3

	If the step-ladder is being erected in a public area or on a public path, then it is essential to provide proper protection for pedestrians or vehicles before the step-ladder is put up Wherever possible a step-ladder should be footed while someone climbs The step-ladder should be resting on a stable and secure surface The step-ladder should be placed away from overhead and wall mounted power cables Step-ladders should never be supported on the bottom rung but always on the feet Tools etc. should be carried in tool bags or belts rather than by hand, so that the step-ladder can be properly gripped during climbing Do not lean from ladders or stepladders
Persons at risk: User	

2.12 Cable pulling

2.12.1 Task: Cable pulling

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

Persons at risk: User

2.12.2 Task: Pulling cables at height

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

Persons at risk: User

2.13 Moving pipes, rolls or irregular shaped or sized materials

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

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

Persons at risk: All site operatives

2.14 Moving of general materials of normal size and shape

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

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

Persons at risk: User

2.15 Movement of boxed materials

2.15.1 Task: Movement of general boxed materials

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

Persons at risk: User

2.16 Air handling unit works

2.16.1 Task: Manoeuvring and installing air handling unit into place

Hazard	Risk	Control measures	RR
Musculoskeletal injuries when installing unit and securing it into place	4 x 3 = 12	Operatives to review manual handling method statement before lifting any heavy or bulky items The use of mechanical lifting assistants should be used for any load that is awkward or weighs more than 25kg Where mechanical aid not feasible, management must ensure sufficient manpower resources are allocated for the safe lifting and position of air handling unit Refer to manufacturer's specification for fixing air handling unit into place	1 x 3 = 3

Persons at risk: All site operatives

2.16.2 Task: Manoeuvring and installing air handling unit into place

Hazard	Risk	Control measures	RR
Unit or materials falling from height onto engineer or other site operatives	3 x 5 = 15	Ensure trained operatives are employed in the safe lifting and securing of air handling unit following LOLER regulations where lifting undertaken Ensure area is cordoned off before undertaking any works, and engineers are working from safe working platforms like fixed scaffolding or access tower Ensure manufacturer's instructions are followed when installing air handling unit on base structure. If unsure, consult site supervisor or nominated structural engineer If AHU being craned into position, ensure operatives follow the separate cranage risk assessment from specialist contractor and LOLER regulations are followed at all times. Employees who are not trained will strictly not be admitted into cordoned lifting space. Site supervisor will be present throughout the lift	1 x 5 = 5

Persons at risk: All site operatives

2.17 Fan coil unit works

2.17.1 Task: Manoeuvring and installing fan coil unit into place

Hazard	Risk	Control measures	RR
Musculoskeletal injuries when installing unit and securing it into place	4 x 3 = 12	Operatives to review manual handling method statement before lifting any heavy or bulky items The use of mechanical lifting assistants should be used for any load that is awkward or weighs more than 25kg Where mechanical aid not feasible, management must ensure sufficient manpower resources are allocated for the safe lifting and position of fan coil unit Refer to manufacturers specification for fixing of condenser unit before undertaking works	1 x 3 = 3

Persons at risk: User

2.17.2 Task: Manoeuvring and installing fan coil unit into place

Hazard	Risk	Control measures	RR
Unit or materials falling from height onto engineer or other site operatives	4 x 4 = 16	Ensure trained operatives are employed in the safe lifting and securing of fan coil unit Ensure area is cordoned off before undertaking any works, and engineers are working from safe working platforms like podium steps or access tower Ensure manufacturer's instructions are followed when fastening hangers to soffit and can carry select loads. If unsure consult site supervisor or nominated structural engineer Use a mechanical handling aid (i.e. genie lift) when positioning & securing fan coil unit into place, ensure unit is securely fastened before removing handling aid If positioning unit without handling aid, ensure workers are not positioned below unit and are in a location where they can safely undertake works without strain	1 x 4 = 4

Persons at risk: All site operatives

2.18 Charging or decanting synthetic refrigerant

2.18.1 Task: Charging or decanting synthetic refrigerant

Hazard	Risk	Control measures	RR
Serious injuries sustained from the transporting of refrigerant or explosion	3 x 5 = 15	Use mechanical handling equipment for cylinders where possible Labels prominently displayed to state refrigerant in system and warning against charging any other gas into system Handle refrigerant in accordance with COSHH Assessment sheet Cylinders to be clearly identified and stored in a separate area Remove cylinders from heat source and always keep cylinders in a cool space Waste refrigerants should be disposed of through registered waste operators only and obtain waste transfer notes Recovered refrigerant should not be transported	1 x 5 = 5

Persons at risk: All site operatives & public

2.18.2 Task: Charging or decanting synthetic refrigerant

Hazard	Risk	Control measures	RR
Synthetic refrigerant coming into contact with skin causing freeze and chemical burns	5 x 3 = 15	Only competent and trained engineers shall undertake any charging or decanting of refrigerant Engineers will never work alone when charging or decanting refrigerant and supervising partner shall be versed in emergency procedures Always wear correct PPE as specified in attached method statement COSHH statements for refrigeration should be read before beginning the operation	1 x 3 = 3

Persons at risk: User

2.18.3 Task: Charging or decanting synthetic refrigerant

Hazard	Risk	Control measures	RR
Asphyxiation due to gases escaping to atmosphere	4 x 5	Any operatives working on equipment designed, or contain F-Gas refrigerants will have an F-Gas Company Certificate and follow legislation accordingly	1 x 5

	= 20	Always use correct tools and equipment for the purpose of charging / re-charging Refrigerants are asphyxiates and can accumulate particularly in low lying areas such as pits, below ground plant rooms, sealed stairwells, beer cellars, etc., therefor ensure adequate levels of ventilation particularly at low lying areas The engineer should strictly control access to the area	= 5

Persons at risk: All site operatives

2.19 Condenser installation

2.19.1 Task: Condenser outdoor installation

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

Persons at risk: User

2.20 Installation of cable trunking and trays

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

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

Persons at risk: User

2.20.2 Task: Installation of cable trunking and trays at height

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

Persons at risk: User

2.21 Testing pressure systems

2.21.1 Task: Testing pressure systems

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

Persons at risk: All site operatives

2.22 Thermal & acoustic insulation to pipework

2.22.1 Task: Thermal & acoustic insulation

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

Persons at risk: User

2.23 Copper pipework installation

2.23.1 Task: Copper pipework installation

Hazard	Risk	Control measures	RR
Lung damage caused by inhalation of fumes (which may contain cadmium) and skin & eye damage from sealants	3 x 3 = 9	All substances required to perform plumbing activities are identified i.e., lead, solder, plumber flux etc. and the relevant COSHH Assessments and personal protective equipment is made available Consider use of respiratory equipment in confined areas Avoid skin contact with sealants and wash from skin as soon as possible All areas must be kept very well ventilated during sealant works and minimum requirement is to open all doors and windows	1 x 3 = 3

Persons at risk: User

2.23.2 Task: Copper pipework installation

Hazard	Risk	Control measures	RR
Serious injuries sustained from fire or explosions whilst using a blowtorch or similar for brazing/bronze welding (oxy-ccetylene & oxy-propane)	4 x 5 = 20	A hot work permit system should be implemented onsite by the principal contractor or client Site operatives must comply with safe procedures and manufacturers instructions whilst undertaking hot works Only suitably trained and competent personnel are permitted to carry out hot works User must ensure all combustible materials are removed, with flammable liquids and gas cylinders beyond the range of the blowtorch When using a blowtorch on metal surfaces, combustible material in contact with the metal behind or adjacent to the work area should be removed before work commences Keep a watch whilst work is in progress for signs of fire or smouldering in the immediate vicinity Ensure a portable fire extinguisher is readily available wherever and whenever hot works are in progress Always extinguish a blowtorch when not in use and never leave it burning unattended Ensure adequate ventilation where gas burning appliances are in use	1 x 5 = 5

		Ensure area is checked thoroughly at the end of the work period and signed off on hot works permit as being safe by site supervisor and user	
Persons at risk: All site operatives			

2.24 General plumbing works

2.24.1 Task: General plumbing

Hazard	Risk	Control measures	RR
Lung damage caused by inhalation of fumes and skin & eye damage from sealants	3 x 3 = 9	All substances required to perform plumbing activities are identified i.e., lead, solder, plumber flux etc. and the relevant COSHH Assessments and personal protective equipment is made available Consider use of respiratory equipment in confined areas Avoid skin contact with sealants and wash from skin as soon as possible if skin contact occurs All areas must be kept very well ventilated during sealant works and minimum requirement is to open all doors and windows	1 x 3 = 3
Persons at risk: User			

2.24.2 Task: General plumbing

Hazard	Risk	Control measures	RR
Slips, trips and falls	4 x 2 = 8	Ensure all live pipework is isolated before undertaking any work to ensure no leakage See slips trips and falls risk assessment	1 x 2 = 2
Persons at risk: All site operatives			

2.25 Electrical testing and commissioning

2.25.1 Task: Testing and commissioning

Hazard	Risk	Control measures	RR
Serious or fatal burns and injuries sustained from electric shock testing 'decommissioned' equipment	5 x 5 = 25	Ensure equipment dead by a competent testing electrician and locked off When testing equipment, where possible test dead, if not possible look at energising to a safe current Review environment in direct vicinity of testing and commissioning If you're testing on live equipment, operative should review risk assessment for live testing	1 x 5 = 5

Persons at risk: User

2.25.2 Task: Testing and commissioning

Hazard	Risk	Control measures	RR
Serious or fatal burns and injuries from electric shock testing live equipment	5 x 5 = 25	Only test engineers are permitted to carry out testing of live equipment as part of their duties Review the area and determine if a separate test area can be created where equipment can be taken for testing Where possible employ residual current devices (RCDs) to provide supplementary protection Physical safeguards should be applied to the equipment under test to prevent injury, e.g. the use of temporary or permanent screens, barriers, and insulating mats Use isolating transformers at the source of supply to mains-powered test equipment if possible if undertaking hardware precautions Where risk of arc flash exists adequate calorific value PPE will be employed and only all insulated tools may be used which have been properly maintained If using a test bench, place all test equipment on an insulated shelf immediately above the test bench All test and shorting leads are to be fused Where there is risk of touching live parts insulated gloves will be worn A second person is to be in attendance in case of accident	1 x 5 = 5

Persons at risk: User

2.26 Removal of existing electrical services

2.26.1 Task: Removal of existing electrical services

Hazard	Risk	Control measures	RR
Falls from height during strip out or removal of services	5 x 4 = 20	Follow working from height risk assessment when striping out fixtures, fittings and services from above When pulling cables at height be sure to employ safe system of work including having another operative to assist with cable pulling	1 x 4 = 4

Persons at risk: User

2.26.2 Task: Removal of existing electrical services

Hazard	Risk	Control measures	RR
Contact with live electricity causing serious or fatal injuries	5 x 5 = 25	Follow electrical isolations risk assessment Employ safe system of work with site supervisor	1 x 5 = 5

Persons at risk: All site operatives

2.27 Electrical work up to 400 volts

2.27.1 Task: Electrical work up to 400 volts

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

Persons at risk: All site operatives

2.28 Electrical isolations

2.28.1 Task: Electrical Isolations

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

Persons at risk: User

Hazardous Waste Registration Report

Details of the company (or individual) providing hazardous waste registration information

Mr Stephen jones

Contact name: Mr Stephen jones
Telephone:
e-mail: steve@sjjsystemservices.com

Number of sites successfully registered: 1

Expected Payment (£) : 23.00

Payment Type: Credit/Debit Card

Payment Made (£) : 23.00

Sites successfully registered *(Previous registration numbers which could not be validated are shown in brackets - you must use the new registration number given from the start dates shown)*

Registration Number	Business Name	Address from application	Start Date	Expiry Date
CAD441	sjj system services ltd	Maes yr Haelog Tredegyr NP22 5JY	08/10/2015	07/10/2016

FGAS CERTIFICATION

STATIONARY EQUIPMENT QUALIFICATION COMPANY CERTIFICATE

VALID FOR THREE YEARS FROM DATE OF ISSUE

OR UNTIL EXPIRY (WHICHEVER IS THE LATEST)

Issued in accordance with the Fluorinated Greenhouse Gases Regulations 2009 No 261

SJJ System Services Ltd
Maes-yr-Haulog
Garden City
Rhymney
Tredegar
Caerffili
NP22 5JY

The above-named company has demonstrated that it employs appropriately qualified personnel in a sufficient number to cover the expected volume of activities in the installation, maintenance or servicing of stationary refrigeration, air-conditioning, and heat pump equipment containing or designed to contain certain fluorinated greenhouse gases.

Fluorinated gases have a high global warming effect if released into the atmosphere! The principal objective of the EC Regulation 517/2014 on certain fluorinated greenhouse gases is to contain, prevent and thereby reduce emissions of F gases covered by the Kyoto Protocol.

Issue Date: 28 September 2015

Expiry Date: 28 September 2018

For and on behalf of Refcom Certification Ltd,
appointed by the Secretary of State for the Environment, Food and Rural Affairs.

Company Number: REF1014315

REFCOM F-GAS CERTIFICATION

defra Department for Environment, Food and Rural Affairs

☎ Claims Helpline
0800 072 2050

Chaucer
INSURANCE

Public and Products Liability Certificate

This certificate has been issued to provide a summary of the certificate holder's Public Liability insurance. For details of the insurance cover provided (including any endorsements applying) please refer to the insurance schedule and the policy booklet. Nothing contained hereon will amend the insurance cover provided.

Certificate No.: UK CCC 1442674

Name of Certificate holder:	SJJ SYSTEM SERVICES LTD
Trading Name(s):	
Business Description:	Electrical & refrigeration engineer. Service environmental test chambers for all industries including calibration machanisms
Date of commencement of insurance:	23/10/2015
Date of expiry of insurance:	22/10/2016
Public Liability limit of liability:	£5,000,000
Products Liability limit of liability:	£5,000,000
Endorsements applying:	G10 - Contractors Conditions G62 - Professional Services Extension

Signed on behalf of the Insurers

Gary Humphreys
For Authorised Insurers

Name and address of issuing intermediary:

Thomas Carroll Brokers Ltd (Commercial)
Pendragon House
Crescent Road
Caerphilly
Mid Glamorgan
CF83 1XX

Issuing intermediary's reference:
(if different from the Policy Number stated above)

CHA007362

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icard SKILL

H&S TESTED

MR S JONES

Reg No: 3829125

Expires End: MAR 2021

The registered holder of this card holds the construction qualifications listed on the reverse

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CSCS

Affiliated

ENGINEERING SERVICES

icard SKILL

MR S JONES

Registration No: 3829125

Expires End JUL 2018

H&S TESTED

HPC HCPC

ACRIB Registered Refrigerant Handler

CSCS

Affiliated

ecs electrotechnical certification scheme

STEPHEN JONES
C0194867

INSTALLATION ELECTRICIAN
MAINTENANCE ELECTRICIAN
WIREMAN/PANEL BUILDER

JIB GRADE
APPROVED ELECTRICIAN

Card Expires 03 10 2016

The registered holder of this card holds the qualifications listed on the reverse

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the LADDER ASSOCIATION

LadderCard

The bearer has completed the **Ladder Association** theory and practical tests, is considered competent in the training categories and at the levels specified below and has been awarded the **Ladder Association** Training Competence Certificate.

Certificate No: 8630

Instructor No: 5978

Level: U

Bearer's Name: Stephen Jones

Category: Ladders & Steps

Date of Expiry: 22 Sep 2016

OMS