

# **HEALTH AND SAFETY**

## **METHOD STATEMENT**

### **AIR CONDITIONING/REFRIGERATION MAINTENANCE/SERVICE**

#### **Air Conditioning Indoor/Outdoor Unit as applicable**

1. Check Pressures
2. Clean filters and screens when necessary
3. Check and adjust temperatures
4. Examine evaporator and other auxiliary controls
5. Examine and test all accessible pipes and joints
6. Check electrical controls
7. Check general performance
8. Clean condenser exterior
9. General cleaning of the equipment
10. Leak Test

#### **Access Equipment**

- ▶ Ladders/Scaffold
- ▶ Step Ladders

#### **Manual Lifting**

- ▶ Max 25 kgs per man.

#### **Environment**

- ▶ None.

#### **Power Tools**

- ▶ Rotary Hammer
- ▶ Pistol Drill
- ▶ Vacuum pump

#### **PPE**

- ▶ Safety footwear, head and eye protection and safety harnesses as required.

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## **METHOD STATEMENT**

### **AIR CONDITIONING/REFRIGERATION MAINTENANCE/SERVICE**

#### **Refrigeration Equipment as applicable**

1. Check pressures
2. Clean filters and screens when necessary
3. Check and adjust temperatures
4. Examine evaporator(s) valves and other auxiliary controls
5. Examine and test all pipes and joints
6. Check electrical controls and defrost system
7. Check general performance
8. Clean condenser exterior
9. Clean Air/Water Cooled Condensers with removable end covers
10. General cleaning and oiling of the equipment
11. Check compressor oil and level as required
12. Leak Test

#### **Access Equipment**

- ▶ Ladders/Scaffold
- ▶ Step Ladders

#### **Manual Lifting**

- ▶ Max 25 kgs per man.

#### **Environment**

- ▶ None.

#### **Power Tools**

- ▶ Rotary Hammer
- ▶ Pistol Drill
- ▶ Vacuum pump

#### **PPE**

- ▶ Safety footwear, head and eye protection and safety harnesses as required.

## **HEALTH AND SAFETY FILE**

### **RISK ASSESSMENT SUMMARY**

#### **Reference Numbers**

- RA/1 - Pipework Installation
- RA/2 - Installing Ductwork
- RA/2A - Removing Ductwork
- RA/3 - Installing Gas Boiler
- √RA/4 - General Manual Handling of Materials/Equipment
- √RA/5 - Brazing and Bronze Welding, including use of oxy-acetylene
- RA/6 - Electric Arc Welding (Not in Confined Space)
- √RA/7 - Ladders and Step Ladders
- RA/8 - Testing and Commissioning (Setting to Work)
- RA/9 - Fan Coil Installation
- RA/10 - Use of Portable Pipe Threading Machines
- RA/11 - Pressure Testing
- RA/12 - General Plumbing
- RA/13 - Pipe Soldering
- RA/14 - Excavations
- √RA/15 - Erecting/Using/Dismantling Mobile Towers
- √RA/16 - Use of Hand Tools
- RA/17 - De-gassing refrigerant

## RISK ASSESSMENT SUMMARY

**General Manual Handling of Materials/Equipment**  
**Significant risks : Back injury, foot injury (heavy items).**

CONTROL ITEM	DETAILS OF CONTROL MEASURES
<b>Documents, Procedures etc</b>	General Company policy on Manual Handling.
<b>Information</b>	Operatives advised of risks of back strain and foot injuries arising from a wide variety of tasks to be carried out on site.
<b>Instruction</b>	Operatives required to avoid manual handling which they believe may cause them injury – beyond their capacity. To make use of lifting aids, hoists etc. wherever practicable. To seek assistance from colleagues (team work) for heavy/awkward tasks.
<b>Training</b>	As part of inductions and regular refresher briefings – operatives advised and reminded of good lifting techniques, to use the legs not the back, etc. To use mechanical devices such as goods hoists after receiving formal training in their correct use, including weekly inspections.
<b>Supervision</b>	Constantly remind operatives of the need to use aids and lift correctly, without bending back. Review job tasks, storage arrangements, access, equipment, environment (see below) etc. to minimise unnecessary materials and equipment movement.
<b>Access</b>	Poor access arrangements may impose additional constraints on good manual handling – to be reviewed by managers/supervisors for each Contract.
<b>Environment</b>	Good lighting, firm footing and other items such as handrails are required to minimise risk of injury.
<b>Equipment</b>	Provision of mechanical aids suitable for the job and site. Hoists to be inspected weekly, examined every 6 months (entry of Statutory Register).
<b>Emergencies</b>	Standard site first aid, fire protection, evacuation, accident reporting and investigation.
<b>Communications</b>	Not applicable
<b>COSHH</b>	Not applicable
<b>PPE</b>	Back support belts may be used, but should not be taken to warrant increasing the weight an operative may safely lift considering his personal capacity.
<b>Other Procedures</b>	Buyers and Contracts Managers to review the materials ordered, and where practicable purchase in suitable sizes for handling (i.e. 25kg bags of a material rather than 50kg bags). Site design to establish storage areas close to work, to minimise handling distances.  HSE Guidance available : Eye Bolts – PM16, Cable Laid Slings and Grommets – PM20, Lifting Gear Standards – PM54

The above controls have been selected to protect the health and safety of operatives and others who may be affected by the work. The controls have been designed to protect against the risks recorded on the risk assessments summary part 1. This general guidance should only be used when it is appropriate to specific site conditions.

## RISK ASSESSMENT SUMMARY

**Using and working with Ladders and Step Ladders**  
**Significant risks : Falls from ladder, ladder slipping, objects dropped by ladder use. Instability of step ladder**

CONTROL ITEM	DETAILS OF CONTROL MEASURES
<b>Documents, Procedures etc</b>	Company Policy. All persons must be trained in the safe use, maintenance and inspection of ladders and hazards avoided.
<b>Information</b>	The correct angle of rest for a ladder is 75 degrees, or a base to height ratio of 1:4 Ladder work is restricted to that which can be carried out using one hand only and stepladder work to that which can be carried out ensuring the stability of the ladder.
<b>Instruction</b>	Ladders will only be used for work of short duration. Top step of stepladder must not be used unless designed for the purpose. Ladders must be secured against slipping, by tying at the top or at the bottom Ladders may only be footed as a sole precaution against movement if less than 3m high. Stepladders must be used fully open, with cords taut.
<b>Training</b>	All operatives must be trained in the safe use, maintenance and inspection of ladders and the hazards avoided.
<b>Supervision</b>	Use of ladders will be monitored regularly, to ensure that operatives are not over-reaching or using two hands to work and that suitable PPE being used.
<b>Access</b>	The ground must be firm, level, dry and free from restrictions.
<b>Environment</b>	Ground to be level and firm. Reasonable lighting required.
<b>Equipment</b>	Ladders must be checked to ensure correct length, type and condition before use. Ladders are subject to a planned maintenance program Damaged ladders will be broken up or removed immediately.
<b>Emergencies</b>	Standard site first aid, fire protection, evacuation, accident reporting and investigations.
<b>Communications</b>	No special requirements.
<b>COSHH</b>	Not applicable
<b>PPE</b>	Safety footwear and head protection may be required.
<b>Other Procedures</b>	Manual handling materials, equipment to work area..

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## RISK ASSESSMENT SUMMARY

### Use of Hand Tools Significant risks : Eye injury. Other minor physical injury

CONTROL ITEM	DETAILS OF CONTROL MEASURES	
<b>Documents, Procedures etc</b>	Operatives are responsible for ensuring that their own tools are in good condition, and are the correct tools for the job.	
<b>Information</b>	Operatives advised of risk of eye injuries, and other minor injuries, which can arise from poor maintenance or incorrect use of hand tools and extension leads.	
<b>Instruction</b>	Operatives required to inspect their tools before each task and ensure that they are in good condition.	
<b>Training</b>	Aspects of tool standards are incorporated into induction and general training, and specific training for specific tasks requiring a higher level of competency.	
<b>Supervision</b>	Remind operatives occasionally of the need to check their own tools. Intervene if operative is identified using a poorly maintained or inappropriate hand tool.	
<b>Access</b>	Not applicable.	
<b>Environment</b>	Not applicable.	
<b>Equipment</b>	Hammers:	Head secure to shaft, shaft smooth (no splits) Head in good condition – no chips, not round edged Handle not bound with any material
	Chisels:	Used with eye protection Kept in good condition – sharp, without mushroom Heads free from oil and grease
	Screwdrivers:	Not carried in pockets, correct size used with work. Work piece not held in free hand.
	Electric:	Checked for electrical integrity regularly, operating on 100V.
	Drills: LI	Correct drill for material selected, kept sharp Check before drilling to ensure avoiding services.
<b>Emergencies</b>	Standard site first aid, fire protection, evacuation, accident reporting and investigation.	
<b>Communications</b>	Not applicable	
<b>COSHH</b>	Not applicable	
<b>PPE</b>	Eye protection required when using cold chisels, electric drills etc	
<b>Other Procedures</b>	When using tools on or adjacent to electrical equipment, ensure equipment is isolated and locked off.	
<b>Maintenance</b>	Some tools, such as chisels, require periodic maintenance to use them safely.	

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	Electric:	Checked for electrical integrity regularly, operating on 100V.
	Drills: LI	Correct drill for material selected, kept sharp Check before drilling to ensure avoiding services.
<b>Emergencies</b>	Standard site first aid, fire protection, evacuation, accident reporting and investigation.	
<b>Communications</b>	Not applicable	
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## RISK ASSESSMENT SUMMARY

**Reclaiming and handling refrigerant gases**  
**Significant risks : Burns from frost bite. Inhaling fumes in confined spaces**

CONTROL ITEM	DETAILS OF CONTROL MEASURES
<b>Documents, Procedures etc</b>	Refrigerant safe handling certificate. Company policy – only trained persons, with knowledge and experience, are authorised to use re-claim machine. Manufacture's/Supplier's Manual to be available on site for guidance.
<b>Information</b>	Operatives advised of risks of burns and oil splashing onto skin and inhaling gas in confined space.
<b>Instruction</b>	Company procedures for safe re-claim of refrigerant and disposal.
<b>Training</b>	To be authorised and trained person to supervise use of re-claim.
<b>Supervision</b>	Ensure only authorised persons and those under their direct supervision use re-claim.
<b>Access</b>	Work area to be checked for good ventilation and possible naked flames.
<b>Environment</b>	Reasonable lighting required, absence of obstacles to free movement preferred.
<b>Equipment</b>	Re-claim machine vacuum pump re-claim bottle weighing scales gauges and hoses to be checked daily by supervisor while in use.
<b>Emergencies</b>	Standard site first aid, fire protection, evacuation, accident reporting and investigations.
<b>Communications</b>	No special requirements.
<b>COSHH</b>	COSHH Assessments for refrigerant gases and oils.
<b>PPE</b>	Safety footwear is required. Head protection may be required. Goggles and gloves.
<b>Other Procedures</b>	Manual handling of materials, equipment to work area.

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