



مجلس أبوظبي للجودة والمطابقة
ABU DHABI QUALITY & CONFORMITY COUNCIL

ABU DHABI OCCUPATIONAL TERMS

HVAC Team Leader – Level 4



22 NOVEMBER 2018
FIRST EDITION



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About the Abu Dhabi Quality & Conformity Council

The Abu Dhabi Quality and Conformity Council (QCC) were established by law No. 3 of 2009, issued by His Highness Sheikh Khalifa Bin Zayed Al Nahyan, President of the UAE. QCC is responsible for the development of Abu Dhabi Emirate's Quality Infrastructure, which enables industry and regulators to ensure that products, systems and personnel can be tested and certified to UAE and International Standards.

Products and services certified by QCC receive the Abu Dhabi Trustmark. The Trustmark designed to communicate that a product or system conforms to various safety and performance standards that set by Abu Dhabi regulators.

Foreword

The QCC, along with relative stakeholders, had developed occupational terms for 21 unique occupations in the construction sector. This was required because of a high dependence on migrant labor to fill key technical roles in the skilled trades and concerns about the productivity of the industry where skills investment is inconsistent.

The occupational terms are professional standards that personnel must meet in order to perform the jobs they assigned to, to produce quality outcomes. The Government of Abu Dhabi, under the leadership of His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE and Ruler of Abu Dhabi, and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi, Deputy Supreme Commander of the UAE Armed Forces and Chairman of the Abu Dhabi Executive Council, has invested heavily, and at high levels of professionalism and safety, in the Infrastructure of Abu Dhabi. Therefore, it is crucial and obligatory to encourage the presence of skilled workmanship to maintain the quality infrastructure value in the Emirate of Abu Dhabi in particular and the United Arab Emirates in general.

Acknowledgments

The QCC would like to thank the members of the working group listed below:

Sr.	Name	Entity
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Introduction

- **Qualification Pack** - HVAC Team Leader
- **Brief description of Job** – A HVAC team leader is an important job role in HVACR works that cater as a mentor for the HVAC technicians and workers and a resource person to implement the work strategy under HVAC supervisors.
- **Personal attributes** – A HVAC team leader should be a good team player who has thorough knowledge in installation and maintenance of HVACR equipment and fittings including but not limited to Chillers, Compressors, AHU's, DX systems, Roof top units, VRV units, Chilled water pipes, refrigerant pipes, valve packages, Ducts & its accessories etc....

Duties and responsibilities	To lead a team of level 3 and level 2 HVAC technicians to install and maintain the HVAC installations and activities on construction sites and required maintenance workers under foreman and supervisors, read and implement the approved shop drawings and details.
Min. qualification	Technical diploma of refrigeration & air-conditioning/Mechanical after high School Diploma/ An Industrial Training Institute certification (ITI) or has 3 years of work experience as level 3 HVAC technician.
Training (Suggested but not mandatory)	On the job training for 6 months.
Work Experience	In line with min qualification he should have a total of 5 years of HVAC work experience among 3 years should be as level 3 HVAC technician.
Performance criteria	As described in relevant chapters



Occupational Terms

No.	Field	Details												
1.	Occupation (Standard Unit)	HVAC Team Leader – Level 4												
2.	Description	This occupational terms specifies the outcome required to perform as an HVAC Team Leader for install, maintain and dismantle all equipment/accessories related HVAC works												
3.	Unit type	<input type="checkbox"/> Knowledge and Skills OR <input checked="" type="checkbox"/> Application												
4.	Elements	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">No.</th> <th style="text-align: center;">Element</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">E1</td> <td>Monitor – inventory, assembly, installation, operation and maintenance of HVAC equipment and systems</td> </tr> <tr> <td style="text-align: center;">E2</td> <td>Prepare effective maintenance schedules and ensure smooth flow of work</td> </tr> <tr> <td style="text-align: center;">E3</td> <td>Carry out reporting and documentation for maintenance activities</td> </tr> <tr> <td style="text-align: center;">E4</td> <td>Identify and resolve issues related to installation, operation or maintenance of HVAC equipment & systems</td> </tr> <tr> <td style="text-align: center;">E5</td> <td>Maintain a healthy, safe and secure working environment</td> </tr> </tbody> </table>	No.	Element	E1	Monitor – inventory, assembly, installation, operation and maintenance of HVAC equipment and systems	E2	Prepare effective maintenance schedules and ensure smooth flow of work	E3	Carry out reporting and documentation for maintenance activities	E4	Identify and resolve issues related to installation, operation or maintenance of HVAC equipment & systems	E5	Maintain a healthy, safe and secure working environment
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5.	QF Emirates level	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10												
6.	Function	<input type="checkbox"/> Policy and strategy QF 9-10 <input type="checkbox"/> Managing QF 7-8 <input type="checkbox"/> Specifying QF 6-7 <input type="checkbox"/> Controlling QF 6 <input checked="" type="checkbox"/> Maintaining capability QF 4-6 <input type="checkbox"/> Performing/carry out QF 1-4												
7.	Entry information and prerequisites	Technical diploma of refrigeration & air-conditioning/Mechanical after high School Diploma/Industrial Institute certification, Training Diploma Trade as Assistant- HVAC/Mechanical, Refrigeration and Air Conditioning, Sheet Metal Works, Construction and Manufacturing-Mechanical.												



No.	Field	Details		
8.	Grading	Application unit: <i>Competent/Not Yet Competent</i>		
9.	Industry sector	Construction & Maintenance		
10.	Developed by	Abu Dhabi Quality & Conformity Council	Government Entities	Related Private Sector
11.	Endorsement date	TBD		
12.	Frequency of review	2 Years		
13.	Version No.	0		
14.	ISCO-08	7124 Insulation Workers, 7126 Plumber and pipe fitters, 7127 Air Conditioning & Refrigeration Mechanics, 7213 Sheet Metal Workers		

Key terms

Term	Description
Personal Protective Equipment (PPE)	Items that construction workers can use to protect themselves against hazards. PPE includes but not limited to gloves, safety helmet, eye protection, face protection, foot protection and appropriate clothing.
Risk	Risk is the product of the measure of the likelihood of occurrence of an undesired event and the potential adverse consequences which this event may have upon: <ul style="list-style-type: none"> · People – injury or harm to physical or psychological health · Environment – water, air, soil, animals, plants and social Risk = frequency x consequences
Hazard	Any substance, physical effect, or condition with potential to harm people, property or the environment.
OSHA	Occupational Safety & Health Administration
OSHAD	Abu Dhabi occupational safety and health center
Building diagram	A technical drawing of a structure or building which drawn in a scale that is proportionate to its real-world dimensions. Building drawings include site plans, floor plans, elevations and sections. Drawings that provide additional specific/specialist details known as Coordination Drawings.
Cross Section	A section is a type of building drawing. It represents a vertical plane cut through the structure.
Elevation	An elevation is a type of building drawing. It is a drawing of the exterior or interior of a building or structure as seen from a horizontal position - without dimensional perspective.
Floor plan	A floor plan is a building drawing. It is a drawing to scale showing a view from above, of the relationships between rooms, spaces and other physical features at one level of a structure.
Layout drawing	An approved design or plans to show the way things are arranged
Site Plan	A site plan is a type of building drawing that shows a new or existing building's position in relation to the boundaries of the block of land.
Work instructions	Written or verbal description of the work to be undertaken by an individual or work team.
HVAC	Heating, Ventilation, & Air Conditioning here refers to "Self-Contained Equipment" i.e. Complete, factory-assembled and tested, heating, air-conditioning equipment installed as a single unit, and having all working parts, complete with motive power, in an enclosed unit of said machinery and/or Split System/DX Split System consisting of indoor unit housing evaporator & fan and outdoor unit housing compressor, condenser and heat rejection fan.
Cassette unit	HVAC equipment installed in false ceiling which recirculates & provides cool air and is part of DX and chilled water equipment.
Airside Chilled Water	HVAC equipment dealing with recirculate, outdoor, or mixed air for purpose of cooling & ventilation

Equipment	
Air Handling Unit	A series of components joined in section that provide cool air and/or treated ventilation air to space directly or indirectly.
Ceiling Suspended Ducted Unit	HVAC equipment hung or installed above false ceiling suspended from slab of floor above.
Compressor	A compressor is a mechanical device that increases the pressure of a gas by reducing its volume. It's the main component in the refrigerant cycle of air conditions and refrigerators. Different types of compressors are Reciprocating compressors, Screw Compressors, Scroll compressors, Centrifugal compressors...
Duct	A tube or conduit utilized for conveying air. The air passages of self-contained systems are not to be construed as air ducts
Duct Accessories	Fire Dampers, Motorized Fire Dampers, Motorized Smoke Dampers, Motorized Combined Fire & Smoke Dampers, Volume Control Dampers installed in duct system to serve designed purpose
Duct Fittings	A piece of duct in a standard form or shape to connect two pieces of ducts
VAV's	Variable air volume (VAV) is a type of heating, ventilating, and/or air-conditioning (HVAC) system. Unlike constant air volume (CAV) systems, which supply a constant airflow at a variable temperature, VAV systems vary the airflow at a constant temperature
DX Equipment	Abbreviation of Direct Expansion; of Refrigerant that takes advantage of latent heat of the refrigerant fluid, and cools it by expansion
Equipment	All piping, ducts, vents, control devices and other components of systems other than appliances which are permanently installed and integrated to provide control of environmental conditions for buildings
Fabricate	Construct or manufacture
Fan Coil Unit	A simple device consisting of cooling coil, fan, motor, & filter used for providing cool air to space
Install	Place or fix equipment or an item in position ready for use
Insulate	The act of protecting something by surrounding it with material that reduces or prevents the transmission of heat
Piping	Pipe: A rigid conduit of iron, steel, copper, brass or plastic. Tube: Semi rigid conduit of iron, steel, copper, brass or plastic
Pressure Test	A test following the installation of new equipment/piping system or modification of existing equipment/piping system where the equipment/piping system is place under pressure to ensure that it will not leak.
Refrigerant	A substance or mixture, usually a fluid used for cooling & heating application.
Rooftop Package Unit	Self-contained HVAC equipment installed on roof that provide cool and/or treated air directly or indirectly to space.
Valve Package	Chilled water valves & accessories installed to operate, test, commission, & maintain equipment such as Fan Coil Unit, Air Handling Unit etc.
Wall Mounted Unit	A part of split system, installed in a space, where it provides recirculates & provides conditioned air.

VRF	Variable refrigerant Flow
EC-Motor	Electronically communicated Motor
VFD	Variable Frequency Drive
PLC	Programmable Logic Control
PICV	Pressure Independent Control Valves
DRV	Double Regulating Valve
BMS	Building Management System
WMS	Work Method Statement
SOP	Standard operating Procedure
GMP	Good Manufacturing Practices



Performance Criteria

Element1: Monitor- inventory, assembly, installation, operation and maintenance of HVAC equipment and Systems.

Scope	<ul style="list-style-type: none"> • Inventory assembly and Installation • System Checks • Maintenance
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Inventory, assembly and Installation	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. coordinate with in & out of organization to determine proper selection of materials and spare parts for installation and maintenance of HVAC equipment</p> <p>PC2. assist in maintaining proper levels of materials/supplies to ensure timely and efficient completion of necessary task</p> <p>PC3. assist in purchase of materials and ensure prevention of defects and maintenance of quality as per requirement</p> <p>PC4. follow the procedure for additional or new installations in assigned job site as per approved WMS</p> <p>PC5. identify defect/problem in HVAC equipment installations</p>
System Checks	<p>PC6. start, operate, monitor and adjust HVAC equipment to ensure proper working (such as air flow and turbulence, pressure differentials, filter efficiencies)</p> <p>PC7. ensure compliance with all regulations and company policies, including inspection and re-inspection of HVAC equipment as per GMP and O&M standards</p> <p>PC8. review all work orders before and after completion</p> <p>PC9. take corrective action in response to typical faults and inconsistencies in equipment readings</p> <p>PC10. set up appropriate equipment or apparatus for testing correctly</p> <p>PC11. calibrate the equipment periodically as per the SOP and manufacturer recommendations</p> <p>PC12. identify defective equipment/apparatus and steps to be taken like support preventive maintenance activities</p> <p>PC13. verify the equipment accuracy by comparing with the standard reference</p> <p>PC14. respond to emergency calls for system and equipment failure</p>
Maintenance	<p>PC15. set and adjust controls</p> <p>PC16. assist relevant stakeholders of HVAC with technical support; technical data, fault identification...</p> <p>PC17. ensure that maintenance helper is working as per the SOP</p> <p>PC18. She/he shall train and guide his Team of Mechanics & Technician for the operation and maintenance of the HVAC Equipment & systems in accordance with the manufacturer's instructions, Equipment O & M Manuals and the provided PMP of the manufacturer and shall also attend and coordinate training session from Equipment Manufacturer/vendor for the proper Maintenance of HVAC Equipment.</p> <p>PC19. He shall be fully aware of the Building HVAC installations Maintenance</p>



	management system. PC20. Shall implement the safe Refrigerant handling and monitoring practices.
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Element2: Prepare effective maintenance schedules and ensure smooth flow of work

Scope	<input type="checkbox"/> Maintenance Schedules <input type="checkbox"/> Operations
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Maintenance Schedules	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. inspect the manpower requirement based on maintenance required</p> <p>PC2. identify the material requirements for carrying maintenance</p> <p>PC3. support preparing planning schedule for maintenance activities by maintenance manager (including preventive maintenance) while ensuring that work is not hindered</p> <p>PC4. select the suitable alternatives in case the appropriate equipment and materials are not available for maintenance and inform the appropriate person</p> <p>PC5. plan the schedule of workmen for maintenance process</p> <p>PC6. inform the workmen of the maintenance schedules</p> <p>PC7. display the appropriate signage for the work being conducted</p> <p>PC8. assign and distribute work orders and work requests</p> <p>PC9. follow vacation schedule for assigned team and ensure that work is not affected adversely</p> <p>PC10. identify and provide appropriate Tools & Tackles for Maintenance Crew.</p>
Operations	<p>PC11. ensure that there is adequate ventilation for the work being carried out</p> <p>PC12. ensure that the workmen are on time as per the schedule</p> <p>PC13. ensure that work is carried out on time</p> <p>PC14. ensure that they are carrying out their work without disturbing others</p> <p>PC15. provide technical assistance when requested</p> <p>PC16. replenish any necessary supplies or consumables</p> <p>PC17. report to the appropriate person any disturbances in material flow or equipment</p> <p>PC18. identify and report to the appropriate person any additional work required that is outside one’s responsibility or skill</p> <p>PC19. follow workplace procedures to deal with any accidental damage caused during the installation and maintenance process and adhere to 5S and TPM guidelines</p> <p>PC20. ensure that, on completion of the work, the area is left clean and dry and meets requirements</p> <p>PC21. ensure that the equipment, materials and personal protective equipment that were used are returned to the right places making sure they are clean, safe and securely stored</p> <p>PC22. assist to determine time and cost estimates for installation and maintenance</p>

Element3: Carry out reporting and documentation for maintenance activities

Scope	<input type="checkbox"/> Reporting <input type="checkbox"/> Recording and Documentation <input type="checkbox"/> Information Security
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Reporting	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. report data/problems/incidents as applicable in a timely manner</p> <p>PC2. report to the appropriate authority as laid down by the company</p> <p>PC3. follow reporting procedures as prescribed by the company</p> <p>PC4. inform supervisors about completed and outstanding work orders in the appropriate means & Software for maintenance.</p>
Recording and Documentation	<p>PC5. identify documentation to be completed relating to one's role</p> <p>PC6. record details accurately in the appropriate format</p> <p>PC7. prepare complete job documentation including site assessments, daily status reporting, assessment reports, post installation reporting, lessons learned, opportunity for improvement, serial number and other relevant information</p> <p>PC8. maintain time, materials and equipment use reports</p> <p>PC9. maintain records of all data attendance and provide effective training to all team</p> <p>PC10. complete all documentation within stipulated time according to company procedure</p> <p>PC11. ensure that the final document meets the requirements of the individuals who requested it or make any amendments accordingly</p> <p>PC12. HVAC Team Leader shall have skills and knowledge of Electronic Data Entry, reporting and communications. He shall be skilled enough to manage data of all alarms and faults from the BMS system and shall keep history of all maintenance activates on the computerized MMS software</p>
Information Security	<p>PC13. respond to requests for information in an appropriate manner while following organizational procedures</p> <p>PC14. inform the appropriate authority of requests for information received</p>

Element4: Identify and resolve issues related to installation, operation or maintenance of HVAC equipment and systems.

Scope	<input type="checkbox"/> Inspection <input type="checkbox"/> Analysis
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Inspection	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. inspect maintenance works to ensure compliance with standard procedures</p> <p>PC2. undertake immediate actions to resolve sudden errors or faults in equipment or functionality of systems</p> <p>PC3. identify non-conformities to the company maintenance SOP</p>

Analysis	<p>PC4. analyze potential causes of non-conformities to operation & maintenance standards and should conduct root cause analysis if required to sort the issue</p> <p>PC5. evaluate the need for action to ensure that problems do not recur and ensure zero productivity loss due to idle machine/equipment and manpower</p> <p>PC6. suggest corrective action to address problem</p> <p>PC7. review effectiveness of corrective action</p> <p>PC8. interpret the results of the inspection correctly</p> <p>PC9. analyze complex drawings, specifications and comprehend oral instructions and general requirements of the job.</p>
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Element5: Maintain a healthy, safe and secure working environment

Scope	<p>Ensuring healthy, safe and secure working environment:</p> <ul style="list-style-type: none"> <input type="checkbox"/> self-monitor and adhere to safety principles and standards <input type="checkbox"/> ensure behavioral safety by workmen to good building maintaining practices and applicable safety standards on the buildings <input type="checkbox"/> report any identified breaches in health, safety, and security policies and procedures to the designated person <p>Managing emergency procedures:</p> <ul style="list-style-type: none"> <input type="checkbox"/> illness <input type="checkbox"/> accidents <input type="checkbox"/> fires <input type="checkbox"/> other reasons to evacuate the premises <input type="checkbox"/> breaches of security
Performance Criteria (PC) w.r.t. the Scope	
Element	Performance Criteria
Ensuring healthy, safe and secure working environment	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. observe and comply with the company’s current health, safety and security policies and procedures</p> <p>PC2. while carrying out work, use appropriate safety gears like head gear, masks, gloves and other accessories as mentioned in the guidelines</p> <p>PC3. report any identified breaches in health, safety, and security policies and procedures to the designated person</p> <p>PC4. responsible for maintaining discipline at the HVAC working area</p> <p>PC5. identify and correct any hazards that the individual can deal with safely, competently and within the limits of their authority</p> <p>PC6. adhere and comply to storage and handling guidelines for hazardous material</p> <p>PC7. identify and recommend opportunities for improving health, safety, and security to the designated person</p> <p>PC8. electrical safety must be followed all times while doing maintenance.</p> <p>PC9. procedures like LOTO, installing warning signs etc... should be implemented while working with energized equipment.</p> <p>PC10. ensure that any electrical equipment under maintenance is isolated from electrical power supply and other potential hazards</p>



	<p>PC11. complete any health, safety and security activities like safety drills and prepare records legibly and accurately</p> <p>PC12. knowledge of chemical substances, their characteristics and required precaution and safety measures</p> <p>PC13. the importance of maintaining high standards of health, safety and security</p> <p>PC14. implications that any non-compliance with health, safety and security may have on individuals, in the maintenance process and the organization</p>
Managing emergency procedures	<p>PC15. report any hazards that the individual is not competent to deal with to the relevant person in line with organizational procedures and warn other people who may be affected</p> <p>PC16. follow the company’s emergency procedures promptly, calmly, and efficiently</p> <p>PC17. evacuation procedures for workers and visitors</p> <p>PC18. how to summon medical assistance and the emergency services, where necessary</p> <p>PC19. how to use the health, safety and accident reporting procedures and the importance of these procedures</p> <p>PC20. different types of occupational health hazards</p> <p>PC21. shall be aware of the Abu Dhabi Environment, Health and safety management systems and shall implement as applicable in coordination with Health & Safety Team.</p> <p>PC22. apply all OSHA guideline requirements when performing the job</p>

Technical Knowledge

Relevant work Context	<p>The user/individual on the job needs to know and exhibit:</p> <p>TK1. Installation, working, fault identification, trouble shooting of HVAC equipment and related components.</p> <p>TK2. Knowledge of tools and equipment handling</p> <p>TK3. Knowledge of standards like SMACNA, ASRHAE... related to HVAC systems</p> <p>TK4. use of data analytics tools and methods to analyze and interpret the data/information captured from the HVAC equipment</p> <p>TK5. methods of using test and diagnostic equipment used in the calibration and repair of HVAC systems including faulty control systems such as direct digital, electronic, electric, pneumatic etc</p> <p>TK6. requirements of different shutdowns and appropriate maintenance, including emergency and routine shutdowns and procedures to follow in the event of a power outage</p> <p>TK7. operating requirements, parameters and corrective action required where operation is outside specified operating parameters</p> <p>TK8. Chemicals, gases and liquids used in the HVAC system maintenance and its functions</p> <p>TK9. Knowledge of testing, repairing or replacing motors, pumps, relays, switches, starters, wiring and other functional components</p>
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Knowledge and Understanding

General & organizational Context	<p>The user/individual on the job needs to know and exhibit:</p> <p>KA1. organizational coding system of HVAC and company manual</p> <p>KA2. different quality management systems (ISO-9000, TS16949, ISO-14001, OHSAS-18000)</p> <p>KA3. impact of various practices on cost, quality, productivity, delivery and safety</p> <p>KA4. characteristics of the material and equipment required in setting up HVAC equipment and their maintenance</p> <p>KA5. implications of using inaccurate measuring and testing equipment</p> <p>KA6. the reason, impact and reoccurrence of equipment failure</p> <p>KA7. the correct method for carrying out corrective actions outlined for each Problem and risk and impact of not following the defined procedures/work instructions</p> <p>KA8. escalation matrix for reporting identified issues, hazards and breakdown</p> <p>KA9. types of documentation used in the organization, importance of maintaining the same and different methods of recording information</p> <p>KA10. procedures for reporting any unresolved issues in maintenance and operation</p> <p>KA11. energy management systems</p> <p>KA12. quality requirements of materials and equipment</p> <p>KA13. method of preparation of estimates and materials order for maintenance and repair jobs</p> <p>KA14. basic computer knowledge including MS office operation</p> <p>KA15. ability to identify documental errors in technical reports.</p> <p>KA16. environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process</p>
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Soft Skills

A. Core Skills/ Generic Skills	Reading Skills
	The user/ individual on the job needs to know and understand how to: SA1. read, understand and interpret manuals, SOPs, health and safety instructions, memos, reports, job cards etc. SA2. read various coding systems as per company norms
	Writing skills
	SA3. do legible entries with permanent ink SA4. write detailed reports for investigation SA5. pay attention to detail while recording maintenance parameters
	Oral Communication (Listening and Speaking skills)
	SA6. communicate with upstream and downstream teams with a proper form and manner and use language that is open and respectful SA7. effectiveness in emergency response and communication
	B. Professional



Skills	SB1. plan and organize resources to ensure assembly, installation and maintenance activities adhere to schedule
	SB2. multi-task and adapt to meet work timelines
	SB3. effectively delegate and lead to plan, lay out, supervise and inspect the work of subordinates
	Decision Making
	SB4. evaluate multiple options on defined, objective parameters when taking assembly, installation and maintenance decisions
	SB5. collaborate with the team for identifying appropriate decisions
	SB6. apply commercial awareness as a decision parameter
	Critical Thinking
	SB7. apply balanced judgment to different situations
	SB8. apply basic mathematical and statistical knowledge
	Analytical Thinking
	SB09. analyze operations data and information to identify assembly, installation and maintenance needs
	SB10. pay attention to detail for identifying faults and anomalies
SB11. spot process disruptions and delays and report and communicate these to the supervisor with solutions	
Problem solving	
SB12. solve conflicts and negotiate on behalf of the team and within the team or get help from an appropriate person, in a way that preserves goodwill and trust	
SB13. explore new ways of doing things	
SB14. identify and objectively evaluate both temporary/short-term and permanent/long-term solutions	

References

<http://www.ukstandards.org.uk>

<http://www.nsdcindia.org/nos>

http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_172572.pdf

<https://www.oshad.ae/en/Pages/OSHTopicInnerViewPage.aspx?topicID=15>

https://dmat.abudhabi.ae/_data/ADC2014/AD_Property_Maintenance_Code/index.html#p=40

<https://dmat.abudhabi.ae/en/About/Pages/buildingcode.aspx>

https://www.nqa.gov.ae/en/Documents/QF_Handbook_FINAL.pdf

[ASHRAE Handbook - HVAC Systems and Equipment 2016](#)