NATIONAL APPRENTICE AND INDUSTRIAL TRAINING AUTHORITY

Transformation of Apprenticeship NVQ - Establishment Assesment Guide

Requirement of Tools , Equipment and others for

REFRIGERATION AND AIR CONDITIONING TECHNICIAN

Competency Standards Code : D29S002.4

(Selected Package for Apprenticeship Mode)

Sourse : National Competency Standard

Name , Address of Estblishment & Contact Number

Date of Assessment : **District:**

NO	Tools,Equipments & Others	Requirment for the Units												Availability at Establishment (Yes/No)	Remarks
		1	2	3	4	5	6	7	8	9	10	11	12		
1	Air compressor / Air blower		✓								✓				
2	Anchor bolt	✓	✓	✓						✓	✓	✓			
3	Anemometer	✓	✓	✓	✓		✓			✓		✓			
4	Anemometer/Air flow meter										✓				
5	Anticorrosive agent		✓	✓			✓			✓	✓				
6	Anti-corrosive paint										✓				
7	Arc and gas welding equipment	✓	✓	✓	✓	✓	✓			✓	✓	✓			
8	Basic Masonry / carpentry tools	✓									✓	✓			
9	Bench vice	✓	✓	✓						✓	✓				
10	Blind revert			✓						✓					
11	Blind revert gun			✓						✓	✓				
12	Blind reverts										✓				
13	Blower						✓								
14	Brazing kit												✓		
15	Brazing rode and flux												✓		
16	Calculator							✓							
17	Chemical, Cleaning agents		✓												
18	Cleaning solvents				✓				✓			✓	✓		
19	Clip-on meter	✓	✓	✓	✓	✓	✓			✓	✓	✓			
20	Computer							✓							

21	Condenser/Evaporator tube cleaning machine				✓										
22	Copper tubes, fittings and accessories	✓	✓	✓		✓	✓			✓		✓			
23	Detergent										✓				
24	Diagnosis tools								✓						
25	Dry nitrogen	✓	✓			✓	✓		✓			✓			
26	Duct fabrication tools			✓						✓					
27	Duct tape			✓	✓					✓					
28	Electric Bench drill	✓	✓	✓	✓	✓	✓			✓	✓				
29	Electric hand drill/ Hammer drill	✓									✓	✓			
30	Electrical cables /wires	✓	✓								✓	✓			
31	Electrical cables /wires and accessories			✓						✓					
32	Electrical Insulation Tester (Megohm)				✓										
33	Electrical testing & measuring instruments			✓	✓					✓					
34	Extension cord		✓	✓						✓					
35	Fire extinguishers								✓				✓		
36	Flushing agents								✓						
37	Gauge manifold with hoses												✓		
38	General Electricians and mechanic's tools	✓	✓	✓	✓	✓	✓			✓			✓		
39	General HVACR Mechanic tools								✓			✓			
40	General tool kit								✓		✓	✓			
41	Grease and oil		✓												
42	Grinder	✓									✓	✓			
43	Hand and power tools			✓						✓					
44	Hand Grinder		✓	✓	✓	✓	✓			✓					
45	High pressure washing / cleaning machine								✓						
46	High pressure water gun						✓								
47	High pressure water Pump		✓												
48	High Pressure Water washer		✓		✓										
49	Hole cutter/ saw	✓									✓	✓			
50	Hygrometer						✓				✓				
51	Indoor unit service cover/bag		✓												

52	Inline filter dryer												✓		
53	Inline oil separator												✓		
54	Insulation material				✓	✓							✓		
55	Insulation tape				✓										
56	Ladders and scaffolding	✓	✓	✓						✓	✓				
57	Leak Detectors (UV/Electronic)								✓						
58	Log sheets				✓										
59	Lubricants				✓		✓		✓		✓	✓	✓		
60	Lubricating equipment										✓				
61	Manifold gauge set		✓	✓						✓		✓			
62	Manifold gauge with hoses	✓													
63	Material for repair of body		✓												
64	Material for repair of corrosion					✓	✓								
65	Measuring and testing tools & equipment								✓			✓			
66	Multi meter	✓	✓	✓	✓	✓	✓			✓	✓	✓			
67	Nitrogen cylinder with regulator	✓	✓	✓						✓					
68	Nitrogen regulator					✓	✓					✓	✓		
69	oil can		✓												
70	Oxygen and acetylene		✓	✓		✓				✓	✓	✓	✓		
71	Oxygen Free Dry Nitrogen												✓		
72	Paint brush		✓	✓	✓		✓			✓	✓				
73	PCB protective coating								✓						
74	Personal Protective Equipment	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
75	Phase sequence meter		✓		✓		✓				✓				
76	Phase sequence tester	✓	✓	✓						✓		✓			
77	Piercing pliers/tapping valve												✓		
78	Plumbing tools			✓						✓					
79	Power Extension cords	✓													
80	PPR / PVC Pipe, fittings and accessories					✓									
81	PPR iron					✓									
82	Pressure test pump			✓						✓					
83	Printer							✓							
84	PVC Pipe, casing, fittings and accessories	✓	✓	✓	✓		✓			✓		✓			
85	recovery cylinders												✓		

86	Recovery equipment/machines					✓	✓								
87	Refrigerant	✓	✓			✓	✓		✓			✓	✓		
88	Refrigerant identifier/analyzer								✓						
89	Refrigerant Leak detectors	✓	✓	✓						✓		✓			
90	Refrigerant recovery and charging equipment								✓						
91	Refrigerant recovery machine												✓		
92	Refrigerants and dry nitrogen			✓						✓					
93	Replaceable components (Bearing, belts, nuts and bolts, etc.)				✓										
94	RH meter (Hygrometer)				✓										
95	Role plug	✓									✓	✓			
96	Safety clothing		✓	✓						✓					
97	Screws	✓	✓	✓						✓	✓	✓			
98	Silicon			✓			✓			✓					
99	Silicon gun			✓			✓			✓					
100	Soap bubble liquid								✓						
101	Soldering iron		✓												
102	Solvent cement			✓						✓					
103	Special air conditioning tools and equipment		✓	✓	✓	✓				✓					
104	Special Refrigeration & air conditioning tools and equipment						✓								
105	Special service tools								✓						
106	Spirit level	✓	✓	✓						✓	✓	✓			
107	Stationaries							✓	✓	✓					
108	Taco meter										✓				
109	Testing & measuring instruments							✓							
110	Thermal Insulation material and duct tape	✓	✓	✓			✓			✓		✓			
111	Thermometer	✓	✓	✓	✓	✓	✓			✓		✓			
112	Thread bar	✓	✓	✓						✓	✓	✓			
113	Tinner						✓								
114	Toque wrench	✓	✓	✓						✓	✓	✓			
115	Tubes												✓		
116	Tubing tool kits	✓											✓		

117	Ultra violet dye								✓						
118	Vacuum cleaner	✓													
119	Vacuum gauge	✓	✓	✓						✓		✓	✓		
120	Vacuum pump	✓	✓	✓			✓		✓	✓		✓	✓		
121	Valve keys												✓		
122	Wall plug		✓	✓						✓					
123	Water pressure gun										✓				
124	Weighing Scale	✓	✓	✓						✓		✓	✓		
125	Welding and brazing rods	✓	✓	✓						✓		✓			
126	Welding rods (Arc and Gas)										✓				
127	Wire brush		✓	✓			✓			✓					
128	work/chassis corrosion		✓												

	Selected Qualification (Package)	Units

forwarded by:	***Recommended by:***
Name of the Officer : ……	*Name of the Officer : ……*
Designation : ……	*Designation : ……*
Signature : ……	*Signature : ……*
Date : ……	*Date : ……*
Official Stamp : ……	*Official Stamp : ……*

Certified by:

Name of the Officer : …… *Designation : ……*

Signature : …… *Official Stamp : ……*

Date : ……