

RJA Panel

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Plumber, CMS

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Md. Wasim
Plumber, Sub-Contractor

Md. Khondaker Arif
Plumber, Sub-Contractor

Md. Tipu Sultan
Plumber, Bangladesh Engineering
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Md. Shakil Gazi
Plumber, Sub-Contractor

Md. Shohag
Plumber, Unilever

Md. Siraj
Plumber, Arong Center

Md. Ashik Sikder
Plumber, CMS

Md. Ahhmedulla
Plumber, DPSL

RJA Facilitator

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Observers

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Secretary, BACI

Rapid Job Analysis of Plumber & Pipe Fitter



08 November 2014

Skills and Employment Programme-Bangladesh (SEP-B)



Results For The Real World

Duties and Tasks

A. Practice Occupational Health and Safety (OHS) Procedure:

A1. Administer safety of the workers	A2. Administer safety of the workplace	A3. Follow safety signs and regulations	A4. Apply personal protective equipment	A5. Control housekeeping hazards	A6. Ensure toilet and sanitation facilities at worksite
A7. Apply first aids on minor injuries	A8. Respond to emergencies and personal wellbeing				

B. Perform Basic Plumbing Pipe Fitting Works:

B1. Interpret specifications of working drawings	B2. Prepare work area for plumbing works	B3. Identify plumbing sign and symbols	B4. Prepare layout for plumbing fittings as per working drawing	B5. Measure the different shapes using measuring tape	B6. Cut pipes according to the measurement
B7. Cut external thread on pipe	B8. Prepare short piece (Pipe nipple)	B9. Bend PVC pipe			

C. Make Plumbing Joints:

C1. Make straight/butt joint of PVC pipe	C2. Make elbow-joint of PVC pipe	C3. Make T-joint of PVC pipe	C4. Make Y-joint of PVC pipe	C5. Make socket joint of PVC pipe	C6. Make union plug joint of PVC pipe
C7. Make cross joint of PVC pipe	C8. Make Long/U trap of pipe	C9. Install off-site fitting joint with pipe	C10. Install uPVC fittings with pipe	C11. Install CI/GI fittings with pipe	

D. Install Different Types of Valves:

D1. Install gate valve with pipe	D2. Install check valve with pipe	D3. Install ball valve with pipe	D4. Install pressure relief valve with pipe	D5. Install conceal valve with pipe	D6. Install glove valve with pipe
D7. Install non-return valve with pipe	D8. Install angle valve (stop cork) with pipe	D9. Install foot valve with pipe	D10. Install socket valve with pipe	D11. Install floating valve with pipe	D12. Install air valve with pipe
D13. Install safety valve with pipe	D14. Install sluice valve with pipe	D15. Install butterfly valve with pipe			

E. Install Different Types of Fittings and Fixtures:

E1. Install hot and cold water supply line	E2. Install waste water line with fittings	E3. Install water pump	E4. Install water meter connection	E5. Install bath shower	E6. Install hand/push shower
E7. Install fixtures in bathtub	E8. Install electrical geyser	E9. Install fixtures in commode	E10. Install fixtures in pan	E11. Install fixtures in sink	E12. Install multilayer composite tube
E13. Install roof water tank	E14. Install water tap (bib cock/CP tap)	E15. Install looking glass	E16. Install low down	E17. Install soap case and tissue holder	E18. Install rainfall water line from roof to ground

E19. Install service pipe line	E20. Install mixture tap	E21. Install 2-in cock	E22. Install water filter with water pipe line	E23. Install fixtures in washbasin	E24. Install liquid soap dispenser
E25. Install dresser with uneven union socket of water line	E26. Install shower tray	D27. Install gas cooker	E28. Install trowel rail	E29. Install glass shelf on the wall	E30. Install grating/mat in the bathroom
E31. Install shower enclosure	E32. Install Jacuzzi in the bathroom	E33. Install ferrule and service pipeline	E34. Insulate underground pipe of boiler		

F. Repair and Maintain Plumbing Works:

F1. Repair gate valve	F2. Repair check valve	F3. Repair ball valve	F4. Repair pressure relief valve	F5. Repair conceal valve	F6. Repair glove valve
F7. Repair non-return valve	F8. Repair angle valve (stop cork)	F9. Repair foot valve	F10. Repair socket valve	F10. Repair floating valve	F12. Repair air valve
F13. Repair safety valve	F14. Repair sluice valve	F15. Repair butterfly valve	F16. Repair water tap	F17. Repair shower	F18. Repair Low down
F19. Repair hand/push shower	F20. Repair mixture tap	F21. Install 2-in cock	F22. Repair water filter	F23. Repair water service line	F24. Repair washbasin
F25. Repair sink	F26. Repair water tank	F27. Repair water pipe line	F28. Repair waste water pipeline	F29. Repair water pump	F30. Repair water closet for commode and pan
F31. Repair gas cooker	F32. Conduct pipe leakage testing	F33. Repair and maintain minor masonry and plastering works			

G. Perform Communication:

G1. Communicate with supervisor and workers	G2. Assist supervisor to prepare work schedule	G3. Receive instruction from Supervisor for day to day works	G4. Provide instruction for cleaning the workplace	G5. Provide instruction to apply safety measures	G6. Communicate over telephone
G7. Write progress report of the work	G8. Keep the attendance records of the workers	G9. Locate the site and give instruction to others			

H. Develop Professionalism:

H1. Take advice from supervisor	H2. Participate in trainings	H3. Attend meetings	H4. Work with the specialized skilled worker	H5. Visit new sites	H6. Explore new opportunities of learning
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Additional Information

<u>Worker Traits</u>		<u>Entry Requirements</u>	<u>Career Path</u>
Punctual Physically and Mentally healthy Physical fitness Male / Female Good Communication Patience Disciplined Honesty	Non-discrimination Team work Good attitude and attentive	Male / Female Grade-V to VIII or equivalent Age: 18 years <u>Duration of Training</u> 3-6 months (4 hours / day)	Sub-Contractor/Supervisor Sr. Foreman Jr. Foreman Sr. Plumber <u>Future Trend</u> This sector is growing fast and huge demand for skilled labor in the local job market and foreign.

<u>Tools and Equipment</u>		
Grinding machine Drill Machine Pipe cutter Concrete Breaker Hack saw with blade Hammer Pipe wrench Screw driver LN Key C-Clump Chisel Pipe vice Table vice Files Measuring tape	Chain Pulley Blower Diestock Slide wrench Center punch Chain coppa Gall coppa Crony Trowel Ton Pliers Olon/Shabol Water Level Sprit level	<u>Measuring Instruments</u> Set squares Dial indicators Micrometers Slide calipers Steel tape Tri-square Steel rule Calculator <u>Personal Protective Equipment</u> Dust mask Goggles Gloves Safety shoes Apron Safety belt Helmet

<u>Related Knowledge</u>	
Name of safety equipment and its uses Types of plumbing works Use of tools and equipment Name of the materials Read, write and numeracy knowledge (simple math) Rules of workplace safety Use of measuring equipment Measuring units Minor plastering works	Safety rules and symbols General preventative maintenance Different steps of plumbing works Types of joint Type of valves Assemble procedure Possible causes of accidents Significance the first aid