



## **TRAINING LAY OFF SCHEME PROGRAMMES 2009/10**

P.O. Box 1955  
Halfway House  
Midrand  
1685

Tel: +27 (0) 11 265 5900  
Fax: +27 (0) 11 265 5924/5

**Qualification Title:** National Certificate Hot Water Systems Installation

**Name of Skills Programme:** Hot Water Installer: NOF Level 2-

**CREDITS - 47**

Unit Standards Title	Unit Standard Number	Level	Credits	Specific Outcomes for each Unit Standard	Training Provider %	Work Place %	Specified Practical Workplace Experience Activities	Notional hours
Explain and perform fall arrest techniques when working at high height.	229998	1	2	<ul style="list-style-type: none"> <li>• Demonstrate basic knowledge of the limitations of a limited range of fall arrest equipment and regulations.</li> <li>• Inspect, assemble and store fall arrest equipment.</li> <li>• Select suitable anchor points.</li> <li>• Use fall arrest systems with a double lanyard.</li> <li>• Use pre-installed vertical and horizontal life-lines and explain reducing risks during rescue.</li> </ul>	75	25	Be able to: <ul style="list-style-type: none"> <li>• Follow fall arrest principles to perform work at high heights safely, under the supervision of a qualified supervisor.</li> </ul>	20
Apply health and safety to a work area.	9964	2	3	<ul style="list-style-type: none"> <li>• Identify potential hazards in the work area.</li> <li>• Limit damage to persons or property in the case of an emergency.</li> <li>• Follow procedures that apply to illness or injury in the work area.</li> </ul>	75	25	Be able to: <ul style="list-style-type: none"> <li>• Apply basic health and safety legislation in the form of standards and procedures governing health and safety in the workplace, to ensure that they contribute to a safe, healthy environment for themselves and others.</li> </ul>	30

Apply plumbing principles as they pertain to the installation of a hot water system.	262786	2	8	<ul style="list-style-type: none"> <li>• Apply principles pertaining to installation of a water system.</li> <li>• Apply basic pipe sizing to plumbing applications or operations.</li> <li>• Describe domestic solar and electrical hot water systems components and materials.</li> <li>• Identify and describe the uses of plumbing tools, components and materials.</li> </ul>	90	10	<p>Be able to:</p> <ul style="list-style-type: none"> <li>• Understand and apply basic knowledge of all principles pertaining to the installation of hot water system, to interpret and apply building drawings, use basic pipe sizing, and to select plumbing system components and materials.</li> </ul>	80
Mount solar water heating system.	262784	2	20	<ul style="list-style-type: none"> <li>• Explain the theory regarding solar heating water systems.</li> <li>• Demonstrate and apply knowledge of roof trusses in order to complete installation of a solar water heating system.</li> <li>• Plan and prepare for installation of a solar water heating system.</li> <li>• Install solar water heating system according to a plumber`s instruction.</li> </ul>	70	30	<p>Be able to:</p> <ul style="list-style-type: none"> <li>• Install the system taking due cognisance of roof types and other related matters.</li> </ul>	200

Provide risk-based primary emergency care/first aid in the workplace.	120496	2	5	<ul style="list-style-type: none"> <li>• Demonstrate the principles of primary emergency care in the workplace.</li> <li>• Sustain a basic level of preparedness for health emergencies in the workplace.</li> <li>• Assess and manage an emergency scene in the workplace.</li> <li>• Demonstrate primary emergency life support for adults, children and infants according to current international protocols.</li> <li>• Explain and manage shock.</li> <li>• Conduct secondary assessment of the sick or injured person and provide appropriate primary emergency care within the workplace.</li> <li>• Keep records of the incident/accident.</li> </ul>	100	0	<p>Be able to:</p> <ul style="list-style-type: none"> <li>• Demonstrate the principles of primary emergency care.</li> <li>• Assess and control a single injury emergency scene in the workplace.</li> <li>• Demonstrate primary emergency life support for adults, children and infants.</li> <li>• Explain and manage shock.</li> <li>• Carry out secondary assessment of the sick or injured person and provide appropriate primary emergency care at the scene.</li> <li>• Keep records of the incident/accident.</li> </ul>	50
Read and interpret construction drawings and specifications.	14054	2	3	<ul style="list-style-type: none"> <li>• Explain the role of drawings and specifications.</li> <li>• Safeguard, store and issue construction drawings.</li> <li>• Apply information from drawings in construction activities.</li> <li>• Identify drawings and symbols used on a construction site.</li> </ul>	80	20	<p>Be able to:</p> <ul style="list-style-type: none"> <li>• Read and interpret elementary construction drawings and specifications. Previously disadvantaged persons who through recognition of prior learning will be able to be accessed against this standard and receive National recognition for their competence.</li> </ul>	30

Erect, use and dismantle access equipment for construction work.	261664	3	6	<ul style="list-style-type: none"> <li>Erect and dismantle a system scaffold with ladder access.</li> <li>Erect and dismantle a trestle scaffold.</li> <li>Erect and dismantle an extension ladder.</li> <li>Erect and dismantle a step ladder.</li> </ul>	75	25	Be able to: <ul style="list-style-type: none"> <li>Perform duties in installing access equipment for construction work effectively and safely.</li> </ul>	60			
<b>TOTAL</b>			<b>47</b>	<b>TOTAL</b>			<b>565</b>	<b>135</b>	<b>TOTAL</b>		<b>470</b>