

1. Title	Install water-based fire service mechanical equipment	
2. Code	EMFSIN301A	
3. Range	Perform different levels of tasks of installing water-based fire service mechanical equipment at workshops or equipment installation points.	
4. Level	3	
5. Credit	6	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of installing water-based fire service mechanical equipment</p> <ul style="list-style-type: none"> ◆ Understand the operating principles of various types of water-based fire service mechanical installations such as: <ul style="list-style-type: none"> • sprinkler system • Fire hydrant/hose reel system • Drencher system • Deluge system • Water spray system ◆ Understand installation drawings of water-based fire service mechanical installations ◆ Understand the installation requirements and specifications of such equipment <p>6.2 Methods and procedures of installing water-based fire service mechanical equipment</p> <ul style="list-style-type: none"> ◆ Master the installation procedures and methods for water-based fire service mechanical installations, including the procedures of material checking, assembly, adjustment and testing; and instruct subordinates to carry out installation work safely and of high quality ◆ Select and use suitable water-based fire service mechanical equipment components and materials ◆ Install and set fire pipes, pumps, switches, hose reels, fire hydrants, fire service inlets, etc. independently at suitable locations ◆ Select, use and maintain basic workshop equipment and tools for class 2 fire service mechanical installation contractors, e.g. threading machine, electric drill, bench fitting tools and welding machine ◆ Use testing tools to conduct functional tests independently after installation <p>6.3 Professionalism in installing water-based fire service mechanical equipment</p> <ul style="list-style-type: none"> ◆ Perform different levels of tasks of installing water-based fire service mechanical equipment according to installation instructions ◆ Undertake installation work of water-based fire service mechanical installations according to safety guidelines required by the law and codes of practice 	

7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to complete different levels of installation tasks systematically and efficiently for water-based fire service mechanical equipment; and (ii) Capable to undertake installation work of water-based fire service mechanical installations according to codes of practice and safety guidelines required by the law.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses elementary knowledge and skill in installing water-based fire service mechanical installations.</p>