

1. Title	Install non-metallic (copper/aluminium) pipes and fittings
2. Code	EMCUIN218A
3. Range	Perform simple installation of typical copper or aluminum pipes and fittings, at general industrial plants, power plants, ship repair, fire & plumbing, gas engineering or work sites where installation work is involved.
4. Level	2
5. Credit	3
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Types of pipes and fitting materials</p> <ul style="list-style-type: none"> ◆ Know about the types of pipes, accessories and materials, including: <ul style="list-style-type: none"> • Types of pipes • Bends and tees • Expansion joints • Joint accessories • Fill materials • Bedding and coating materials • Heat preservation materials <p>6.2 Methods of installing and jointing pipes</p> <ul style="list-style-type: none"> ◆ Capable to apply general repairing and bench fitting techniques, including marking, sawing, chiselling, drilling, scraping, grinding, jointing and sealing, in pipe installation according to requirements ◆ Capable to joint pipes by silver soldering, copper brazing, tin soldering, compressing, etc. ◆ Capable to apply common methods of cold or thermal bending in simple installation of pipes ◆ Place rubber gaskets or pads at proper positions to prevent leakage <p>6.3 Professionalism in pipe overhaul and installation</p> <ul style="list-style-type: none"> ◆ Capable to use correct tools in simple installation of copper or aluminium pipes according to requirements ◆ Perform pipe installation according to legal requirements and the code of safety; pass the leakage test

7. Assessment Criteria	The integrated outcome requirement of this unit of competency is: (i) Capable to install common copper or aluminum pipes and fittings correctly and safely according to pipe-laying and legal requirements and the code of safety; pass the leakage test.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge of mechanics and installation skills.