

1. Title	Install thermal insulation materials for regular-shape devices	
2. Code	EMPEIN217A	
3. Range	Perform simple tasks for installing engineering thermal insulation materials in regular-shape devices such as pipes and mechanical parts in general industrial plants, power plants or other places.	
4. Level	2	
5. Credits	3	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Properties and simple installation methods for engineering thermal insulation materials</p> <ul style="list-style-type: none"> ◆ Understand the properties of various types of engineering thermal insulation materials including: <ul style="list-style-type: none"> • Microporous calcium silicate products • Mineral cotton and its products • Aluminosilicate fibre and its products • Glass wool and its products • Cementitious materials ◆ Understand the common defects of thermal insulation materials and accessories, and their causes and solutions ◆ Understand the installation requirements for thermal insulation materials in equipment installation drawings <ul style="list-style-type: none"> • Symbols for thermal insulation material installation • Models of materials • Minimum thickness and hierarchical dimensions • Requirements on compression of thermal insulation materials in the process of work • Treatment of joints in the process of thermal insulation work • Simple installation method <p>6.2 Techniques of installing thermal insulation materials in regular-shape devices</p> <ul style="list-style-type: none"> ◆ Follow the requirements of drawings and working guidelines to perform simple procedures of installing thermal insulation materials <ul style="list-style-type: none"> • Use pipe binding method to install thermal insulation materials in devices such as adjacent heat pipe • Devices are mostly regular and simple in shape • Leave space for expansion joints, expansion gaps and sealing in thermal insulation equipment such as vertical furnace wall ◆ Identify and use the protection layers of general thermal insulation materials to perform installation, such as: <ul style="list-style-type: none"> • Plastering mortar • Winding glass cloth • Metal shell for protection 	

	<p>6.3 Professionalism in installing thermal insulation materials</p> <ul style="list-style-type: none"> ◆ Follow the requirements of drawings as well as the requirements of the codes of practice and manufacturers' installation guidelines to perform installation tasks for engineering thermal insulation materials
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to point out and identify various types of thermal insulation materials; and (ii) Capable to install thermal insulation materials in regular-shape devices under instruction.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses general installation bench fitting techniques.</p>