1. Title	Ship woodwork and laying of insulation
2. Code	EMSRRM304A
3. Range	Apply the techniques and knowledge of woodwork and heat resistance materials to perform general frontline tasks of fabrication of and repair to ship woodwork and repair to insulation and cladding.
4. Level	3
5. Credit	3
6. Competency	Performance Requirements
	 6.1 Knowledge of ship timber and heat-resistant materials Understand the types, characteristics, quality and uses of the following materials, and the methods of handling, storing and repairing them: Ship timber and plates Glass-fibre-reinforced and chemical plastic materials Insulation and fire-resistant materials Understand the principles of processing ship timber and heat-resistant materials, such as cleaning, drying, anti-corroding, sawing, planing, joining, enhancing, jointing, binding, covering and packaging Understand the following points related to general maintenance and repairs of woodwork and insulation Range of working temperatures Requirements on breaking stress Properties of cold resistance, heat resistance or electrical insulation resistance Anti-corrosion protection and heat conduction
	 6.2 Techniques and methods of processing ship woodwork and insulation insulation woodwork and insulation is select appropriate materials for fabrication of and repair to woodwork and vessels Select appropriate insulation materials for application under different temperature and insulation conditions according to manuals and correct practice Cut, remove and assemble ship woodwork and insulation according to approved practice and procedures and processing requirements Adopt appropriate measures, according to circumstances and conditions, to repair or replace aged or damaged sections of woodwork like deck, bulkheads, guards, furniture and structures; and insulation materials of furnaces, kitchens (or pantries), toilets and pipes, etc.

	 6.3 Professionalism in processing ship woodwork and outer insulation layer packaging Allocating the required materials according to actual situations (such as environmental factors) Preparing drawings for processing Allocating items for processing and making work arrangements
	 Examine the sections of woodwork and insulation materials which are frequently damaged, such as wooden deck, wooden facilities, anti-corrosion layer, protective layer and decorative layer, and give repair advice on the following aspects if necessary:
	 Appearance Structure Sealing Water resistance Fire protection Protection, such as heat resistance, insulation and explosion resistance Chemical properties, such as insulation and heat conduction
7. Assessment Criteria	 Compile simple repair reports The integrated outcome requirements of this unit of competency are: (i) Capable to perform general repairs of ship woodwork and insulation layers and test the quality of fabrication and repair according to approved practice and procedures; and (ii) Capable to select and use appropriate methods to assess the working conditions of
	woodwork and insulation layers and adopt appropriate measures to repair ageing and damaged sections.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge of insulation materials and the competency of making woodwork and glass-reinforced plastic (such as EMSRIN103A "Woodwork and production of glassfibre-reinforced plastic" and EMSRDE203A "Lofting and modelling according to hull-line diagrams").