
Overview

This standard identifies the competences you need to apply fairing/filling compounds to yacht and boat substrates, in accordance with approved procedures. You will be required to access the appropriate contractual and other specifications, check that these are of the latest issue and extract all necessary information in order to carry out the fairing/filling activities. You will be required to check that all surfaces to which fairing/filling compound is to be applied have been prepared, in accordance with the process specification and that any necessary exclusion, containment, masking, protection, ventilation and heating requirements are implemented. You will be expected to select the appropriate and/or specified equipment and ensure that it is fit for purpose and is correctly set up, maintained and adjusted.

Your responsibilities will require you to comply with organisational policy and procedures for the fairing/filling activities undertaken and to report any problems with these activities that you cannot personally resolve, or are outside your permitted authority, to the relevant people. You will be expected to work with a minimum of supervision, taking personal responsibility for your own actions and for the quality and accuracy of the work that you carry out.

Your underpinning knowledge will provide a good understanding of your work and will provide an informed approach to applying fairing/filling compounds to yachts or boats. You will understand the fairing/filling procedures and techniques used and their application. You will know about the substrates, their preparation requirements, fairing/filling materials and their preparation requirements, in sufficient depth to provide a sound basis for carrying out the activities, correcting faults and for ensuring that the treated surfaces are to the required industry standards and to the customer's expectations.

You will understand the safety precautions required when carrying out the fairing/filling applications. You will be required to demonstrate safe working practices throughout and will understand the responsibility you owe to yourself and to others in the workplace.

Applying fairing/filling compounds to yachts and boats

Performance criteria

You must be able to:

- P1 work safely at all times, complying with health and safety legislation, regulations, directives and other relevant guidelines
- P2 ensure the material surfaces to be treated are suitably prepared for the fairing/filling compound applications
- P3 check that the appropriate equipment and tools are set up and maintained at satisfactory operating conditions and levels
- P4 carry out the complete fairing and filling process in accordance with operating procedures and the component/project specification requirements
- P5 ensure that the treated workpiece achieves the required fairness and meets the industry and contractual standards and customers acceptance criteria
- P6 deal promptly and effectively with problems within your control and report those that cannot be solved
- P7 dispose of waste and excess materials in line with agreed organisational procedures
- P8 shut down the equipment to a safe condition on completion of the fairing/filling activities

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Knowledge and understanding

You need to know and understand:

- K1 the safe working practices and procedures to be observed when working with hand and mechanical surface preparation tools (such as general workshop and site safety, appropriate protective equipment, protecting other workers from the effects of the work, safety in enclosed/confined spaces, working at height, atmospheric controls)
- K2 how to recognise and deal with emergencies and the procedures to be followed (such as methods of safely evacuating and closing down of compartments in the case of fire or other major incident, first aid, fire fighting and resuscitation of personnel)
- K3 statutory requirements, risk assessment procedures and relevant requirements of HASAWA, COSHH, (such as Approved Codes of Practice (ACOP), The Management of Health and Safety at Work Regulations, The Provision and use of Work Equipment Regulations; the Confined Space Regulations; The Special Waste Regulations; the Pollution Prevention and Control Regulations; The Water Resources Act)
- K4 the hazards associated with the fairing/filling products to be applied (including information to be found in manufacturers' data sheets and in Chemical Hazard Information and Packaging for Supply (CHIPS) data sheets and with any tools and equipment used (solvent vapours, dermatitis exposure, airborne particles, heat) working at heights and over water, confined spaces and the importance of adequate and safe lighting)
- K5 the environmental impact of the operations you are carrying out and of the materials you are using and the minimisation of this impact
- K6 the requirements for working in confined spaces and the importance of emergency procedures and safe systems of work (including permits to work, Required Air Quantities (RAQs) and local exhaust ventilation (LEV) to maintain safe conditions, the provision of adequate and safe lighting and avoidance of sources of ignition)
- K7 the personal protective equipment (PPE) to be worn during the fairing/filling processes
- K8 how to obtain the required work procedures and instructions and how to interpret these requirements (to include the appropriate standards and specifications, use of manufacturers' data sheets to ascertain any product preparation requirements, application limitations, any special application recommendations)
- K9 how to carry out currency/issue checks of the specifications you are working with
- K10 the need to ensure that the substrate has been correctly prepared for the product to be applied

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- K11 the importance of maintaining appropriate environmental conditions for ~~the application and curing of the product being applied~~
 - K12 the procedures for the safe handling and safe use of the products being applied
 - K13 selection of the correct tools and equipment for the preparation and application of the materials to be used
 - K14 the techniques required for the application of the materials to a variety of surfaces
 - K15 the requirements for working afloat, on outer bottoms and at height
 - K16 any requirements for exclusion zones
 - K17 the procedure to contain and to clear away spillages
 - K18 the importance of appropriate environmental conditions for the application of particular products and for the curing of the fairing/filling products
 - K19 the quality control requirements and techniques to be observed
 - K20 the identification of faults in application, their causes and their correction
 - K21 the safe and appropriate disposal of waste materials
 - K22 the extent of your own responsibility and whom you should report to if you have problems that you cannot resolve

Additional Information

Scope/range related to performance criteria

You must be able to:

1. Ensure that the appropriate measures are implemented before commencing application of the fairing/filling compounds, to include carrying out **all** of the following:
 - 1.1. use the correct contractual customer and manufacturers' specifications
 - 1.2. adhere to procedures or systems in place for risk assessment, COSHH, CHIPS data, personal protective equipment and other relevant safety regulations
 - 1.3. confirm that appropriate emergency arrangements are in place for any confined space or hazardous work (where applicable)
 - 1.4. ensure that appropriate exclusion zones and containment facilities are set up
 - 1.5. ensure that the surface or component to be treated is prepared in accordance with the appropriate manufacturers specification and recommendations
 - 1.6. carry out any necessary protection of non-treated areas by means of masking, taping, covering
 - 1.7. provide weather protection for the areas to be faired/filled (where appropriate)
 - 1.8. ensure that environmental conditions meet the requirements for the application of the fairing/filling compounds (such as surface temperature, air humidity, ambient temperature, dew point)
 - 1.9. provide any means required to promote the curing of the product used (such as air supply, warm air, heating)
2. Carry out the **all** of following when applying the fairing/filling compounds:
 - 2.1. confirm that the product is correctly specified
 - 2.2. prepare the product in accordance with manufacturers recommendations
 - 2.3. select appropriate and correct tools as recommended and/or specified by the product manufacturer
 - 2.4. apply product in accordance with manufacturers recommendations and specifications (such as temperature, mixing ratios, thicknesses)
3. Apply fairing/filling compounds on **five** of the following surfaces:

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- 3.1. horizontal 'flat' surfaces
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- 3.2. vertical 'flat' surfaces
 - 3.3. inclined surfaces
 - 3.4. curved surfaces
 - 3.5. round parts
 - 3.6. corners (such as outside corners, edges, obscured corners)
 - 3.7. fairing other minor blemishes, spot repairs
4. Apply fairing/filling layer(s) to achieve **all** of the following:
 - 4.1. correct applied fairing/filling layer(s) without defects such as air-pockets, surface contamination, excessive overfill areas
 - 4.2. smooth surface, free from all surface irregularities such as pinholes, lumps, sharp edges
 - 4.3. achieve uniform material colour without streaks or lumps
 - 4.4. correct component/project surface profile which meets industry and contractual standards and customer acceptance criteria
 5. Apply fairing/filling, in accordance with **one** of the following:
 - 5.1. BS or ISO standards and procedures
 - 5.2. customer (contractual) standards and requirements
 - 5.3. company standards and procedures
 - 5.4. product manufacturer's specifications and recommendations
 - 5.5. recognised compliance agency/body's standards (such as Lloyds, Boat Safety Scheme, BMEA Code)
 - 5.6. other accepted international standards
 6. Reinstate the work area on completion of the fairing/filling activities, to include carrying out **all** of the following:
 - 6.1. clean and returning all tools, equipment and excess materials
 - 6.2. remove protection and exclusion arrangements (if no longer required)
 - 6.3. leave the work area in a safe and clean condition
 - 6.4. complete all relevant documentation (such as condition/pre-treatment of substrates, fairing/filling material preparation, material batch numbers, environmental conditions such as temperature, humidity, dew point)

SEMME3237 – HY17 04

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Developed by	SEMTA
Version number	2
Date approved	March 2014
Indicative review date	April 2017
Validity	Current
Status	Original
Originating organisation	SEMTA
Original URN	SEME3237
Relevant occupations	Marine Engineering Trades
Suite	Marine engineering suite 3
Key words	Marine; engineering; yacht; boat; fairing; filling; compounds; surface; layer